UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE NINTH CIRCUIT

THE SOUTHERN PACIFIC COMPANY, a Corporation,
THE SOUTHERN PACIFIC RAILROAD COMPANY, a Corporation,
HOMER S. KING, Trustee, JAMES K. WILSON, Trustee,
THE CENTRAL TRUST COMPANY OF NEW YORK, a Corporation,
THE EQUITABLE TRUST COMPANY OF NEW YORK, a Corporation,
THE KERN TRADING & OIL COMPANY, a Corporation,

Appellants,

THE UNITED STATES OF AMERICA.

Appellee.

TRANSCRIPT OF RECORD

ON APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES OF AMERICA.

IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

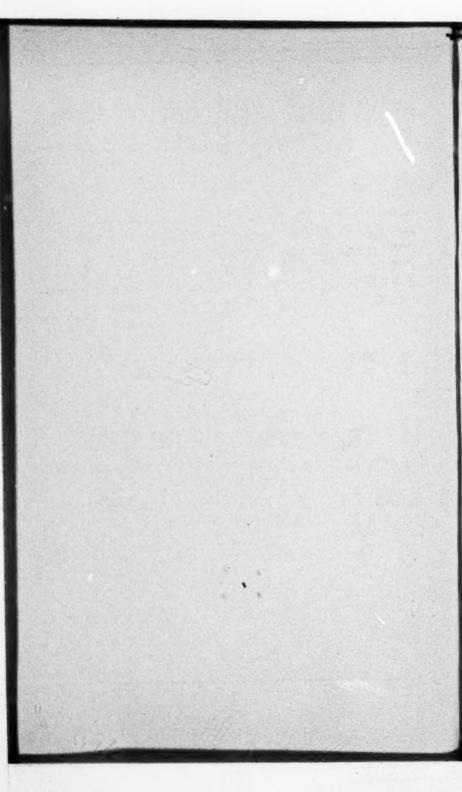


TABLE OF CONTENTS

	Page
Names and Addresses of Attorneys	vii
Citation	v
Caption, District Court	1
Bill of Complaint	2
Answer of Defendants other that The Equitable	
Trust Company	23
Proceedings Under Section 20 of the Judicial Code	35
Minute Order of March 28, 1912	35
Minute Order of April 9, 1912	36
Minute Order of January 18, 1915, spread-	
ing on minutes order creating Special	
Term	37
Minute Order of January 18, 1915, spread-	
ing on minutes stipulation and order	
re designation of Judge Bean and	
hearing at Los Angeles	39
Answer of The Equitable Trust Company	42
Orders extending and enlarging time to take	
testimony	53
Order of January 29, 1912	53
Order of March 14, 1912	54
Order of August 12, 1912	58
Order of September 21, 1912	60
Order of December 2, 1912	63
Order of February 3, 1913	65
Order of March 21, 1913	67
Order of May 7, 1913	69
Memorandum of Conclusions of the Court	70

	Page
Final Decree	80
Orders enlarging and extending time to present	
Statement of Evidence	84
Order of February 12, 1916	85
Order of February 19, 1916	86
Order of March 17, 1916	87
Order of May 15, 1916	89
Order of May 31, 1916	90
	[2A]
Orders enlarging and extending time to present Statement of Evidence (con.):	
Order of September 18, 1916	90
Order of October 4, 1916	92
Order of October 19, 1916	92
Stipulation of Counsel with reference to Statement of the Evidence on Appeal, filed December	
1 1016	94
Stipulation of Counsel as to setting appeal for	7
argument	90
Stipulation of Parties with reference to Condensed Statement of Evidence, filed January 27	,
1917	99
Order approving Statement of Evidence on appeal	101
Condensed Statement of Evidence, transcribed	e
stipulation of January 27, 19171 to	3887
Petition for and Order Allowing Appeal	3887
Assignment of Errors	3890
Bond on Appeal	.3895
Praecipe for Transcript of Record	3900
Clerk's Certificate to Transcript	3903
	[3A]

CITATION ON APPEAL

In the District Court of the United States for the Ninth Circuit, Southern District of California, Northern Division.

UNFFED STATES OF AMERICA,
Plaintiff,

VS.

THE SOUTHERN PACIFIC COMPANY,
(a Corporation)

THE SOUTHERN PACIFIC RAILROAD COM-PANY, (a Corporation).

HOMER S. KING, (Trustee),

JAMES K. WILSON, (Trustee),

THE CENTRAL TRUST COMPANY OF NEW YORK, (a Corporation)

THE EQUITABLE TRUST COMPANY OF NEW YORK, (a Corporation),

THE KERN TRADING & OIL COMPANY,

(a Corporation),

Defendants.

United States of America, to the United States of America, Greeting:

You are hereby cited and admonished to be and appear in the United States Circuit Court of Appeals for the Ninth Circuit, to be held at San Francisco, State of California, within thirty days from the date of this citation pursuant to an order allowing an appeal to the defendants filed and entered in the clerk's office of the District Court of the United States for the Southern District of California, Northern Division,

from a final decree signed, filed and entered upon the ninth day of August, nineteen hundred and fifteen, in that certain suit in equity, being Number Two Hundred and Twenty-One, wherein the United States is plaintiff, and is appellee herein, and the Southern Pacific Company, The Southern Pacific Railroad Company, Homer S. King, Trustee, James K. Wilson, Trustee, The Central Trust Company of New York, The Equitable Trust Company of New York, [5A] and the Kern Trading and Oil Company are defendants and are appellants herein, to show cause, if any there be, why the decree rendered against said defendants, appellants herein as in said order allowing said appeal should not be corrected, and why justice should not be done to the parties in that behalf.

Witness the Honorable

ERSKINE M. ROSS,

United States Circuit Judge for the Ninth Circuit, this 29th day of January, 1916.

ERSKINE M. ROSS,

Circuit Judge and Judge of the United States Circuit Court of Appeals for the Ninth Circuit. [6A]

[Endorsed]: Orig. No. C. C. 221. In the District Court of the United States for the Ninth Circuit Southern District of California, Northern Division. United States, Plaintiff, vs. Southern Pacific Company, et al., Defendants. Citation. Filed Feb. 4, 1916, Wm. M. Van Dyke, Clerk, By R. S. Zimmerman, Deputy Clerk. Guy V. Shoup, Charles R. Lewers, Joseph H. Call, Of Solicitors for Defendants. Received copy of the within this 31st day of Jan. 1916. Albert Schoonover, U. S. Atty., Robert O'Connor, Assistant. [7A]

Names and Addresses of Attorneys

For Appellants:

(The Southern Pacific Company, The Southern Pacific Railroad Company, Homer S. King, Trustee James K. Wilson, Trustee, The Central Trust Company of New York, and the Kern Trading & Oil Company.)

GUY V. SHOUP, ESQ., Flood Building, San Francisco, California,

JOSEPH H. CALL, ESQ., 910-914 Union Oil Building, Los Angeles, California,

CHARLES R. LEWERS, ESQ., Flood Building, San Francisco, California.

For Appellant:

(The Equitable Trust Company of New York)

JAS. W. McKINLEY, ESQ., 706 Security Building, Los Angeles, California.

For Appellee:

(The United States of America)

ALBERT SCHOONOVER, ESQ., United States Attorney, Los Angeles, California,

F. P. HOBGOOD, ESQ., Special Assistant to the U. S. Attorney General, 214 Post Office Building, San Francisco, California. [4A]

GENERAL INDEX TO WITNESSES

	Pages o		al Trans	eript	
.m. Chan A	Direct 3601	Cross 3622	Redirect 3631	Recross	Herein 1999
Allison, Chas. A.,	158	181	194	197	153
Anderson, Ira M.,	100	101	198		
Anderson, Frank M.	4834	5119	5268	5281	2373
			5288	5290	
			5296	5297	
Armstrong, Geo. W.	8129	81/1	8175		3493
		8176	8203	8206	
Allen, Noah	8579	8587	8605		3579
Archer, Judge Osceol	a,				
Atomor, sure	8227	8230			3515
Bandettini, A.	3004	3013	3018	3019	1807
Barlow, C. A.	3669	3679	3701	3702	2006
Darlow, C. 22.				3703	
Barrett, Parker	942	949			523
Barrett, Frank	819	827	837	839	478
Darreve, 11din			840		
Bass, M. B.	8263	8272	8289	8310	3524
Dass, M. D.			8314	8316	
			8319	8318	
Battee, E. L.	3715	3720	3732	3734	2036
Dattee, D. D.			3734		
Bell, L. D.	2983	2993	2998	3002	1802
Ben, D. D.			3003		
Bettison, I. N.	8210	8212	2		3512
Blaffer, Robert Lee,			8 8260)	3515
Blodget, H. A.	605		•		360
Blodget, H. A.	633		3		
		STATE OF STREET	THE PARTY NAME		

The United States

	Direct	Cross	Redirect	Recross	Herein
Bowler, Paul D.	8044	8047	8079	8081	3473
Branner, John Casper	1377	1389	1420	1427	1000
			1428	1429	
			1430		
Brisco, Charles	494	508	524	525	334
			526		
Burks, Chas. T.	3960	3970	3995	3995	2059
Chapman, I. N.	415	422	426		313
Cheek, J. R.	8558	8566			3572
Cooley, W. H.	3031	3051	3057		1808
Cunningham, Charlot	te D.				
	2003	2015	2026		1319
Davidson, W. H.	8110	8114	8126		3488
Davidson, Ben S.	8606	8610	8614	8615	3582
			8615		
Dennee, A. C.	8556	8490	8495		3556
Doan, L. E.	3997	4006	4032		2068
Dover, H. P.	776	781	791	793	461
Drouillard, S. C.	30	43	70	75	114
			82		
Dumble, E. T.	5986	6044	6235		2896
	5817				
Dunlop, S. J.	3061	3072	3097		1819
Dyer, B. T.	3909	3928	3956	3957	2049
			3958	3959	1000
Eberlein, Chas. W.	1692				1032
	1723	1040	1077	1966	
	1778	1848	1977	1900	
n i D C	4004	4640	2002	ACTO	9040
Ewing, D. S.	4634	4642	4658	4658	2248
Farnum, N. C.	853	879	931	939	493

	Direct	Cross	Redirect	Recross	Herei [®]
Finney, Edward C.	2366	2389			1580
Gleaves, James M.	2	4			104
Goodyear, H. C.	3020				1816
Graham, E. S.					1979
Graham, Robert E.	4214	4226	4260	4261	2130
			4263	4264	
Greene, L. E.	9623	9705	9706		3676
Greene, Henry A.	3705	3710	3714		2035
Griffin, Thomas J.	2028	2051	2077		1324
Haberkern, Charles F	. 556	563	576	577	349
			578		
Hall, Fred H.	3099	3108	3134	3135	1822
Hart, Harry J.	4120	4128	4155	4156	2092
Hill, W. H.	. 13	14			109
Hively, Chas. A.	4354	4362			2159
Hoehting, A. A., Jr.					1339
Hood, William J.	7851	7859			3395
Howe, Benjamin M.	3237	3248	3272	3275	1882
			3281		
Howk, B. K.	3180	3204	3232	3236	1841
Hotchkiss, O. E.	4105				2086
Hubbard, M. T.	841	848	852		488
Jackson, Dan M.	8520	8525	8533		3566
Jean, John	83	90	94	95	127
			99		
Jones, W. T.	8083	8091			3482
Kaerth, J. W.	696	699			416
Kay, E. W.	4090	4098	4103	4103	2084
Kerr, John P.	4186	4194	4209	4211	2122
Kimble, Fred	4159	4165	4183	4184	2116
Kingsbury, J. W.	10143				3686

	Direct	Cross	Redirect	Recross	Herein
Kinsey, David	2957	2968	2974	2980	1794
			2981	2982	
Klipstein, T.	549	553	553	554	347
Kruttschnitt, Julius	6287	6332	6434	6445	3079
Lamont, Charles W.	1079	1087	1092	1093	579
Lee, B. K.	295	309	318	319	224
			320	323	
Lightner, A. T.	3396	3406	3427		1977
Lang, John	3326	3334	3349	3351	1953
			3354		
Lowe, F. D.	129	143	157		145
Luke, W. J., Jr.	4766	4862			2255
Maddux, D. W.	3355	3359	3368		1970
Martin, F. Oskar	528	532	534	535	343
			546	546	
	1174	1189			
		1260	1327	1330	609
Meves, C. H.	3634	3640			2003
Miley, E. J.	2875	2895	2949	2954	1707
McCay, James F.	681	688	693		409
McCracken, George	2.				3584
	8616	8618	8629	8631	
McClimans, John I.	3300	3305	3322		1931
McClintock, H. H.	3369	3378	3394	3394	1973
McKittrick, W. H.	953	966	990	993	527
			995	996	
McMurtry, L. B.	4033	4052	4082		2076
	4086	4087	4088		
Nevill, F. I.	8321	8350	8432	8437	3539
			8440	8441	

	Direct	Cross	Redirect	Recross	Herein
Ochsner, W. H.	4391	4445			2168
		4519	4580	4611	
			4632		
Ogden James A.	3442	3448	3465	3468	1882
Olcese, Louis V.	2839	2854	2854 2856	2855	1697
Ott, W. E.	362	380			272
Overton, Eugene	3521	3530	3543	3543	1988
Owen, Erwin W.	2547	2630	2636	2641	1607
Parks, J. R.	8534	8540			3569
Pollard, John A.	3545	3576			1993
Prutzman, Paul W.	4332	4349			2150
Russell, Robert H.	7872	7877	7922		3402
Ryan, Edwin C.	2458	2467	2519	2531	1597
Sarnow, F. J.	199	213			164
Sarnow, Ludolph G.	101	113	125		133
Scupham, John R.	1096	1107	1134	1141	684
Shannon, Samuel	4266	4274	4304	4306	2139
			4307	4307	
			4311		
Shaw, James M.	5299	5456	5489 5493	5492	2742
Shay, Frank	7033	1			3122
Shreve, H. M.	748	764	774		446
Snell, Albert Adam	8632	8637	8652 8654	8652	3586
Sterling, E. A.	8442	8445	8453 8454	8453 8454	3552
Stone, George A.	1702	1714	1716	1720	1028

	Direct	Cross	Redirect	Recross	Herein
Storke, T. M.	3736	3755	3775		2040
			3777	3780	
			3781		
Stewart, Geo. W.	10347	10443	10457		3751
Sylvester, W. G.	580	593		1. 1.3	355
Thomas,	3136	3149	3171	3176	1827
			3177	3177	
			3178	3178	
Taff, J. A.	5495	5573	5752	5780	2749
"Testimony Omitte	ed,"			((3199)
Thompson, Henry	M. 262	280	293		201
Thompson, Mrs. C.	. R.				
	3787				
	4661	4764	4764		2047
Thompson, C. R.	3795	3866	3876	3908	2048
			3908		
Tracy, Theodore	3282	3285	3297		1929
Treadwell, J. B.	708	726	734	740	424
			743	747	
	7927	7948	8033	8036	3413
			8039	8039-	43
Veatch, A. C.	23				111
	1338				
	1431	1434	1632	1650	687
Wagy, J. I.	326	338	352	354	237
			356	358	
Wagy, M. S.	235	245	253	253	174
			256	256	
Waugh, M. S.	4312	4321			2145
Wible, Samuel P.	427	452	480	486	317

xiv The Southern Pacific Co. et al. vs.

	Direct	Cross	Redirect	Recross	Herein
Whittier, Colon F.	796	801	809	811	468
			813	814	
			815		
Whittier, M. H.	3469	3479	3489	3495	1984
Williams, P. G.	7038	7083			3122
	9340				3590
White, W. E.	7098				3152
Youle, W. E.	997	1025	1069	1072	540
			1078		

ALPHABETICAL INDEX OF EXHIBITS

Affidavits:	Page
As to posting notice of land selections	2000
C. W. Eberlein selection of lands	. 3800
Publication of notice of land selections	3832
Associated Oil Company:	. 3857
Abstracts of Title of Stock 3660	9675
Annual Statements, Feb. 24, 1903 to Dec. 31	-3013
1912	
Minutes of Executive Committee 3613	2000
Production	2140
Statements of Expenditures	2100
Check:	3123
T. J. Griffin, Aug. 28, 1903	9540
Comr. G. L. O.:	3340
Comr. Fimple to Ryan, Dec. 10, 1903	1547
Comr. Fimple to R. & R. Feb. 11, 1904	
Comr. Fimple to R. & R. Feb. 11, 1904	1555
Directing allowance of selection	1508
Comr. Richards to R. & R. Feb. 20, 1904	1557
Letter to R. & R. revoking suspension, Aug.	1001
18, 1903	1513
Letter to R. & R. relieving from suspension	
30–21, Sep. 22, 1903	1520
Letter to R. & R. Feb. 28, 1900	1524
Letter to Ryan to examine lands, Oct. 23,	
1903	1542
Letter to R. & R. to relieve from suspension	
on Ryan report, Feb. 11, 1904	1555

	Page
Elk Hills Oil Wells—Anderson's report on (1912):	
Number and depths of wells	2491
Rate of decline	2495
Production costs 2502, 2505,	2516
Value of oil	2516
Time and cost of well 2522,	2033
Cost of operation	2537
Kern Trading & Oil Co:	
List for transfer	3064
Lease from S. P. Co	2961
Leases:	
S. P. Co. to Andrizzi Olcese Co	1698
S. P. Co. to K. T. & O. Co	2961
Letters:	
Bass to Markham, Dec. 30, 1903	3535
Branners to Chase, Oct. 18, 1910	1989
Chambers to Eberlein, Oct. 12, 1903	1472
Chambers to Eberlein, Sep. 22, 1903	1518
Chambers to Eberlein, Oct. 24, 1903	1480
Chambers to Eberlein, Nov. 30, 1903 1481,	1482
Chambers to Eberlein, Dec. 10, 1903	1482
Chambers to Eberlein, Dec. 16, 1903	1484
Chambers to Eberlein, Jan. 13, 1904	1486
Chambers to Eberlein, Feb. 13, 1904	1506
Chambers to Eberlein, Feb. 13, 1904	1490
Chambers to Eberlein, Feb. 13, 1904	1507
Chambers to Eberlein, Mar. 7, 1904	1492
Chambers to Eberlein, Mar. 9, 1904	1494
Chambers to Eberlein, Mar. 15, 1904	1495

The United States	xvii
	Page
Chambers to Eberlein, Apr. 11, 1904	1498
Chambers to Eberlein, Aug. 5, 1904	1499
Chambers to Eberlein, Aug. 18, 1904	1501
Chambers to Eberlein, Sep. 21, 1904	1502
Chambers to Eberlein, Dec. 16, 1904	1503
Chambers to Eberlein, Mar. 7, 1904	1510
Chambers to Comr. Oct. 7, 1903	1539
Chambers to Comr. Nov. 30, 1903	1544
Chambers to Herrin Dec. 16, 1903	1483
Chambers to Madden Aug. 19, 1903	1512
Chambers to Kruttschnitt, Oct. 12, 1903	1474
Comr. Fimple to Ryan, Dec. 10, 1903	1547
Comr. Fimple to R. & R. Feb. 11, 1904	1555
Comr. Fimple to R. & R. Feb. 11, 1904	1508
Comr. Fimple to Ryan directing examina-	
tion of lands, Oct. 23, 1903	1542
Comr. Fimple to R. & R. revoking suspen-	
sion on Ryan report, Feb. 11, 1904	1555
Comr. Fimple to R. & R. Aug. 4, 1904	3852
Comr. Richards to R. & R. Feb. 20, 1904	1557
Comr. Richards to R. & R. revoking suspen-	
sion, Sep. 22, 1903	1520
Comr. Richards to R. & R. revoking suspen-	
sion, Aug. 18, 1903	1513
Comr. Herman to R. & R. Feb. 28, 1900	1524
Comr. Macy to R. & R. Apr. 5, 1904, relieving	1021
suspension 30–23	1568
Cummings', special agent, to Comr. G. L. O.	-500
July 13, 1900	3868
Cummings to Comr. July 13, 1900	1527

	Page
Dumble to Owen, Sep. 11, 1902	1609
Dumble correspondence in re K. T. & O. Co.	
	-2960
Eberlein to Cornish, Sep. 3, 1904	1075
Eberlein to Chambers, Dec. 10, 1903	1577
Eberlein to Stone, Mar. 8, 1904	1493
Owen to Dumble, Mar. 25, 1903	1615
Owen to Dumble, July 16, 1905	1626
Owen to Dumble, July 20, 1905	1629
Owen to Kruttschnitt, Oct. 9, 1902	1630
Ryan's, special agent, second report, Mar. 22,	
1904	1559
Ryan's report, Feb. 11, 1904	1555
Ryan's, special agent, report, Jan. 22, 1904.	1549
Stewart, Register, to Eberlein, Sep. 6, 1904	3855
Stewart, Register, to Eberlein, Sep. 14, 1904.	3856
Stewart to Comr. sending accepted enclosed	
List No. 89, Sep. 14, 1904	3857
Stewart to Eberlein, Aug. 10, 1904, ordering	
corrected list	3854
Visalia to Eberlein, Mar. 7, 1904	
Parietos to Come G. I. O. July 14 1904	

Lists:
No. 89 of lands selected by S. P. Co. Nov.
1903 381
No. 89 revised 3939–384
Owen's list of lands not oil and lands oil 1621-162
Manuals from Sec'y files S. P. Co. 1902-1909 134
Mineral application for Fuller's earth 3879-388
Mineral locations, abstract 30-23 165
Notices:
Of posting railroad selections 386
Of Appeal (land contest) 386
Of location of Mining claims 165
Of publication railroad selection 385
Owen's report as to mineral and nonmineral lands 1620
Owen's report as to mineral and nonmineral lands
1634–1638
Owen's report as to mineral and nonmineral lands
Patent United States to S. P. Co
Reports:
Cummings, special agent, July 13, 1900 1527
Comr. Fimple to R. & R. Feb. 11, 1904 1558
Comr. Macy to R. & R. Apr. 5, 1904 1568
Owen's report of lands mineral or nonmineral,
plaintiff's Ex. 4-M 1626
Ryan, special agent, Jan. 22, 1904 1549
Ryan's, special agent, second report, Mar. 22,
1904

Index to Judgment Roll and Appeal

	Pape
Bill of Complaint	1
Answer to S. P. Co. and others	23
Answer of Equitable Trust Company	42
Orders of Court enlarging time	53-70
Opinion of Judge Bean, district judge	71
Final decree	81
Petition for appeal and order allowing same	3888
Assignment of errors on appeal	3890
Bond on appeal and order approving same	3896
Appellant's preacipe on appeal	3900
Order of Judge Bean approving condensed state- ment in part and directing what parts to	
transcribe by questions and answers	92
Stipulation of parties designating parts of record	
to print on appeal	94
Stipulation of parties approving condensed state-	
ment on appeal	100
Order of Judge Trippet approving condensed	
statement on appeal and directing original	100
documents to be transmitted	102
Stipulation to set cause for argument on appeal	00
for May 7-15, 1917.	99

IN THE DISTRICT COURT OF THE UNITED STATES OF AMERICA, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA,

NORTHERN DIVISION.

THE UNITED STATES OF AMERICA,
Plaintiff,

VS.

THE SOUTHERN PACIFIC COMPANY, a corporation,

THE SOUTHERN PACIFIC RAILROAD COM-PANY, a corperation,

HOMER S. KING, Trustee, JAMES K. WILSON, Trustee,

THE CENTRAL TRUST COMPANY OF NEW YORK, a corporation,

THE EQUITABLE TRUST COMPANY OF NEW YORK, a corporation,

THE KERN TRADING & OIL COMPANY, a corporation,

Defendants.

C. C. No. 221. [8A]

The Southern Pacific Co. et al. vs.

IN THE CIRCUIT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA,

NORTHERN DIVISION.

UNITED STATES OF AMERICA, Plaintiff,

VS.

The Southern Pacific Company, a corporation, The Southern Pacific Railroad Company, a corporation, Homer S. King, Trustee, James K. Wilson, Trustee, The Central Trust Company of New York, a corporation, The Equitable Trust Company of New York, a corporation, and the Kern Trading and Oil Company, a corporation,

IN EQUITY No. 221

Defendants.

To The Judges of the Circuit Court of The United States For the Ninth Circuit, Sitting Within and For the Southern District of California.

The United States of America, by The Attorney General, brings this bill of complaint against The Southern Pacific Company, a corporation, The Southern Pacific Railroad Company, a corporation, Homer S. King, Trustee, James K. Wilson, Trustee, The Central Trust Company of New York, a corporation, The Equitable Trust Company of New York, a corporation, and The Kern Trading and Oil Company, a corporation, and thereupon [9A] complains and shows unto your Honors:

I.

The defendant, The Southern Pacific Company, is a corporation organized and existing under and by virtue of the laws of the State of Kentucky and a citizen and resident of said last named State.

The defendant, The Southern Pacific Railroad Company, is a corporation organized and existing under and by virtue of the laws of the State of California and a citizen and resident of said last named State.

The defendants, Homer S. King and James K. Wilson are residents and citizens of the city of San Francisco in the State of California and are now the surviving trustees under a certain trust deed executed by the defendant, The Southern Pacific Railroad Company, bearing date April 1, 1875, and purporting to secure the payment of \$46,000,000 of the corporate bonds of said Southern Pacific Railroad Company, and which said trust deed is now claimed to be a lien upon the lands involved in this suit.

The defendant, The Central Trust Company of New York, is a corporation organized and existing under and by virtue of the laws of the State of New York, and is a resident and citizen of the said last named state; and said Central Trust Company of New York is sole trustee, under a certain deed of trust executed by the defendant, The Southern Pacific Railroad Company, and the defendant, The Southern

Pacific Company, to said Central Trust Company of New York, as Trustee, bearing date September 15. 1893, purporting to secure the payment of \$58,000,-000 of the corporate bonds issued and to be issued by said Southern Pacific Railroad Company, and is also sole trustee under a certain supplemental trust deed executed by said Southern [10A] Pacific Railroad Company, and said Southern Pacific Company to said Central Trust Company of New York, bearing date August 18, 1898, amending said trust deed bearing date September 15, 1893, in certain particulars, and among other things, in that it restricted the amount of bonds authorized to be issued thereunder to the sum of \$30,000,000; and which said trust deeds, bearing date September 15, 1893, and August 18, 1898, respectively, are now claimed to constitute liens upon the lands involved in this suit.

The defendant, The Equitable Trust Company of New York, is a corporation organized and existing under and by virtue of the laws of the State of New York, and is a resident and citizen of said last named State. Said Equitable Trust Company is sole trustee under a certain deed of trust executed by the defendant, The Southern Pacific Railroad Company, to said Equitable Trust Company of New York as Trustee, bearing date January 3, 1905, purporting to secure the payment of \$88,502,000 of refunding bonds issued and to be issued by said Southern Pacific Railroad Company, and which said deed of trust is now claimed to constitute a lien upon the lands involved in this suit.

The defendant, The Kern Trading and Oil Company, is a corporation, organized and existing under and by virtue of the laws of the State of California, and is a resident and citizen of said last named State.

П.

By Act of Congress approved July 27, 1866, The Congress of the United States made a grant of certain lands, privileges, and franchises, to aid in the construction of certain railroads mentioned in said Act of Congress. Sections 3, 4 and 18, of said Act of Congress are in words and figures as follows: [11A]

SEC. 3. And be it further enacted, That there be, and hereby is, granted to the Atlantic and Pacific Railroad Company, its successors and assigns, for the purpose of aiding in the construction of said railroad and telegraph line to the Pacific Coast, and to secure the safe and speedy transportation of the mails, troops, munitions of war, and public stores, over the route of said line of railway and its branches, every alternate section of public land, not mineral, designated by odd numbers, to the amount of twenty alternate sections per mile, on each side of said railroad line, as said company may adopt, through the Territories of the United States, and ten alternate sections of land per mile on each side of said railroad whenever it passes through any State, and whenever, on the line thereof, the United States have full title, not reserved, sold, granted, or otherwise appropriated, and free from pre-emption or other claims or rights at the time the line of said road is designated by a

6

plat thereof, filed in the office of the Commissioner of the General Land Office; and whenever, prior to said time, any of said sections or parts of sections shall have been granted, sold, reserved, occupied by homestead settlers, or pre-empted, or otherwise disposed of, other lands shall be selected by said company in lieu thereof, under the direction of the Secretary of the Interior, in alternate sections, and designated by odd numbers, not more than ten miles beyond the limits of said alternate sections, and not including the reserved numbers: Provided. That if said route shall be found upon the line of any other railroad route, to aid in the construction of which lands have been heretofore granted by the United States. as far as the routes are upon the same general line, the amount of land heretofore granted shall be deducted from the amount granted by this act: Provided further, That the railroad company receiving the previous grant of land may assign their [12A] interest to said "Atlantic and Pacific Railroad Company," or may consolidate, confederate, and associate with said company upon the terms named in the first and seventeenth sections of this act: Provided further, That all mineral lands be, and the same are hereby, excluded from the operations of this act, and in lieu thereof a like quantity of unoccupied and unappropriated agricultural lands in odd-numbered sections nearest to the line of said road, and within twenty miles thereof, may be selected as above provided: And provided further, That the word "mineral," when it occurs in this act, shall not be held to include iron or coal: And provided further, That no money shall be drawn from the Treasury of the United States to aid in the construction of the said "Atlantic and Pacific Railroad."

SEC. 4. And be it further enacted. That whenever said Atlantic and Pacific Railroad Company shall have twenty-five consecutive miles of any portion of said railroad and telegraph line ready for the service contemplated, the President of the United States shall appoint three commissioners to examine the same, who shall be paid a reasonable compensation for their services by the company, to be determined by the Secretary of the Interior; and if it shall appear that twenty-five consecutive miles of said road and telegraph line have been completed in a good, substantial and workmanlike manner, as in all other respects required by this act, the Commissioners shall so report under oath, to the President of the United States, and patents of lands, as aforesaid, shall be issued to said company, confirming to said company the right and title to said lands situated opposite to and coterminous with said completed section of said road. And from time to time, whenever twenty-five additional consecutive miles shall have been constructed, completed, and in readiness as aforesaid, and verified by said commissioners to the President of the United States, then patents shall be issued [13A] to said company conveying the additional sections of land as aforesaid, and so on as fast as every twenty-five miles of said road is completed as aforesaid.

SEC. 18. And be it further enacted, That the Southern Pacific Railroad, a company incorporated under the laws of the State of California, is hereby authorized to connect with the said Atlantic and Pacific Railroad, formed under this act, at such point, near the boundary line of the State of California, as they shall deem most suitable for a railroad line to San Francisco, and shall have a uniform gauge and rate of freight or fare with said road; and in consideration thereof, to aid in its construction, shall have similar grants of land, subject to all the conditions and limitations herein provided, and shall be required to construct its road on the like regulations, as to time and manner, with the Atlantic and Pacific Railroad herein provided for."

Ш.

Thereafter and by a certain Joint Resolution of Congress, approved June 28, 1870, the Congress of the United States did provide as follows:

"BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA IN CONGRESS ASSEMBLED: That the Southern Pacific Railroad Company of California may construct its road and telegraph line, as near as may be, on the route indicated by the map filed by said Company in the Department of Interior on the third day of January, eighteen hundred and sixty-seven; and upon the construction of each section of said road, in the manner and within the time provided by law, and notice thereof being given by the Company to the Secretary

of the Interior, he shall direct an examination of each such section by Commissioners to be appointed by the President, as provided in the Act. making a grant of said Company, [14A] approved July twenty-seventh, eighteen hundred and sixty-six, and upon the report of the Commissioners to the Secretary of the Interior that such section of said railroad and telegraphic line has been constructed as required by law. it shall be the duty of said Secretary of the Interior to cause patents to be issued to said Company for the sections of land coterminous to each constructed Section reported on as aforesaid, to the extent and amount granted to said Company by the said Act of July twenty-seventh, eighteen hundred and sixty-six, expressly saving and reserving all the rights of actual settlers, together with the other conditions and restrictions provided for in the third section of said Act."

IV.

On or about the 10th day of March, 1901, such proceedings were had and taken that the defendant, The Southern Pacific Railroad Company, then and thereafter assumed to be the successor of the original Southern Pacific Railroad Company mentioned in Section 18 of said Act of Congress approved July 27, 1866, and in said Joint Resolution of Congress approved June 28, 1870, and as such successor, has ever since said 10th day of March, 1901, assumed to exercise and enjoy all of the rights, privileges and benefits granted to said original Southern Pacific Railroad Company by said Act of Congress approved

July 27, 1866, and said Joint Resolution of Congress approved June 28, 1870.

V.

On or about August 31, 1904, the defendant, The Southern Pacific Railroad Company, in the manner required by law, made application for a patent from the United States of America for certain lands claimed to have inured to the benefit of said Southern Pacific Railroad Company under said Act of Congress approved July 27, 1866, and said Joint resolution approved June 28, 1870, as the successor of the original grantee as aforesaid. [15A]. And in that behalf said Southern Pacific Railroad Company did file and cause to be filed in Plaintiff's land Office, at Visalia in the State of California, the district in which all of the lands claimed as aforesaid, were and are situated, an application for said patent, together with a list of the lands claimed as aforesaid, supported by certain affidavits and other documents, in form as required by law and prescribed by the regulations of the plaintiff touching the procedure applicable thereto. Said list of lands claimed as aforesaid included all of the lands described in that certain patent hereinafter particularly mentioned and described, to-wit: All of the following tracts of lands situated in Township thirty south of base line and Range Twentythree East of Mount Diablo Meridian, in the State of California, to-wit: All of Section fifteen, containing six hundred forty acres; Lots numbered one, two, three, four, five, six, seven, eight, nine, ten, eleven and twelve of Section Seventeen, containing four

hundred sixty-four acres and forty-nine hundredths of an acre; the lots numbered three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen and fourteen of Section nineteen, containing four hundred seventy-one acres and thirty-six hundredths of an acre; all of Section twenty-one, containing six hundred forty acres; all of Section 23, containing 640 acres, the lots numbered one, two, three, four, five, six, seven, eight, nine, ten, eleven and twelve and the West half of Section twenty-five, containing six hundred ninety-three acres and thirty-two hundredths of an acres; all of Section 27, containing six hundred forty acres: all of Section Twenty-nine, containing six hundred forty acres; all of Section thirty-three, containing six hundred forty acres; all of Section thirty-five, containing six hundred forty acres. [16A]

VI.

All of the lands last herein described, and claimed by said defendant, The Southern Pacific Railroad Company, as aforesaid, were, and are, mineral lands and because thereof were, and are, by the terms of said Act of Congress approved July 27, 1866, and said Joint Resolution of Congress approved June 28, 1870, excepted and excluded from the operation of said grant, all of which facts were well known to said defendant, The Southern Pacific Railroad Company and its officers and agents at and prior to the time of the application for patent for said lands as aforesaid.

But designing and intending to cheat and defraud the plaintiff of all of said mineral lands, the said Southern Pacific Railroad Company did falsely, 12

fraudulently, dishonestly and unlawfully include said mineral lands in the list of lands claimed under the terms of said grant as aforesaid; and did falsely, fraudulently, dishonestly and unlawfully conceal from the plaintiff and the plaintiff's officers having authority in the premises, the mineral character of said lands; and in and by said application for patent did falsely, fraudulently, dishonestly and unlawfully represent that all of said lands, and particularly said lands last hereinbefore described, were non-mineral in character, and were of the character contemplated by the aforesaid grant; and for the purpose of deceiving, and defrauding the plaintiff, as aforesaid, said application for patent was supported by a certain affidavit signed and sworn to by one Charles W. Eberline, as the Acting Land Agent of the said Southern Pacific Railroad Company, (said Charles W. Eberline being then and there duly authorized to represent and act for said Southern Pacific Railroad Company in the premises), in and by which said affidavit it was falsely, fraudulently, dishonestly and unlawfully stated and sworn, among other things, [17A] that the said lands claimed as aforesaid including the lands hereinbefore particularly described, were not interdicted mineral lands and were of the character contemplated by the aforesaid grant, which said statement was false in this, that all of said lands contained rich and valuable deposits of minerals, and were, and are, mineral lands, and none of said lands were of the character contemplated by the aforesaid grant, but on the contrary, all of said lands were by

the terms of said grant expressly excluded and excepted from the operation thereof, all of which facts were then and there and theretofore well known to the said Southern Pacific Railroad Company and the said Charles W. Eberline; all of which said false statements and representations were made for the purpose of deceiving the plaintiff and the plaintiff's said officers having authority in the premises, and inducing the issuance of a patent for said lands fraudulently and unlawfully claimed by said defendant, the Southern Pacific Railroad Company, as aforesaid.

Plaintiff's said officials were deceived by the aforesaid false statements and representations and were induced to and did believe and rely upon said false and fraudulent statements and representations; and acting upon the belief that all of said statements and representations were true, induced by and on behalf of the said defendant, The Southern Pacific Railroad Company, as aforesaid, plaintiff's said officers were induced to and did cause to be issued the plaintiff's patent for said lands which said patent bears date March 1, 1909. [18A]

VII.

By the aforesaid false and fraudulent statements and representations, made by and on behalf of said defendant, The Southern Pacific Railroad Company, as aforesaid, PLAINTIFF'S said officials were induced to and did omit to make any examination, investigation or inquiry whereby the true facts in the premises might have been discovered; and omitted to in any manner adjudicate or determine

whether any of said lands were in fact mineral or non-mineral in character, or were in fact of the character contemplated by the aforesaid grant, but said patent was issued in reliance upon the aforesaid false, and fraudulent statements and representations made by and on behalf of said Southern Pacific Railroad Company, as aforesaid; and through inadvertence and mistake PLAINTIFF'S said officials did omit to insert in said patent, any clause or provision excepting or excluding from the operation thereof mineral lands in compliance with the provisions of said Act of Congress approved July 27, 1866, and said Joint Resolution of Congress approved June 28, 1870.

VIII.

The defendant, The Southern Pacific Company, is a holding corporation organized under and by virtue of the laws of the State of Kentucky, as aforesaid, for the purpose of controlling, and operating that certain syndicate of railroads known as the Southern Pacific System, including the railroad franchises and other property of the defendant, the Southern Pacific Railroad Company. By stock ownership and otherwise the defendant, The Southern Pacific Railroad Company now is, and ever since the year 1887, has been, owned, dominated and controlled by said defendant, The Southern Pacific Company.

Further designing, and intending to defraud the plaintiff [19A] and to conceal the aforesaid frauds practiced upon the plaintiff, as aforesaid, and for the further purpose of securing to said defendant,

The Southern Pacific Railroad Company, and said defendant, The Southern Pacific Company, the benefit of certain mineral lands fraudulently and unlawfully claimed by said defendant. The Southern Pacific Railroad Company, as aforesaid, including those certain lands hereinbefore particularly described, the defendant, The Kern Trading and Oil Company was organized under and by virtue of the laws of the State of California as a mere dummy corporation, for the benefit and use of said defendant. The Southern Pacific Railroad Company, and said defendant, The Southern Pacific Company. And in that behalf some secret agreement, in the nature of a mineral lease or otherwise (the exact particulars concerning which is to the PLAINTIFF unknown) has been entered into by or in the name of said defendant, The Southern Pacific Railroad Company, and said defendant, The Kern Trading and Oil Company, by virtue of which some pretended right, title or interest now is or will be asserted by and in the name of said defendant. The Kern Trading and Oil Company, in and to said lands hereinbefore particularly described. The PLAINTIFF leaves said defendants to set forth the nature and extent of said pretended right, title and interest, but in that behalf states that said defendant, The Kern Trading and Oil Company, has no right, title, interest, claim or lien whatsoever in, to or upon any of said lands, and particularly as against the rights, equities and remedies of the PLAINTIFF in the premises. [20A]

IX.

The aforesaid lands hereinbefore particularly described aggregate approximately sixty-one hundred nine and seventeen hundredths of an acre, and are of a value exceeding ten millions of dollars. None of said lands have ever been reduced to possession or in any manner improved. But the PLAINTIFF is informed and believes, and therefore avers, that the defendants and each of them and particularly said defendant, The Southern Pacific Company, said defendant, The Southern Pacific Railroad Company, and said defendant, The Kern Trading and Oil Company, threaten to, and will, unless restrained therefrom, enter upon and take possession of said lands, and extract minerals therefrom, and particularly the deposits of oil and petroleum therein contained, and will otherwise commit waste and trespass thereupon, to the irreparable injury of the PLAINTIFF in the premises.

X.

The defendants and each of them assert some right, title, interest or lien into or upon said lands hereinbefore particularly described or some part thereof under and by virtue of said patent issued, as aforesaid, in addition to the several claims herein specifically set forth. The PLAINTIFF is not informed as to the exact nature and extent of any of said claims asserted, as aforesaid, and therefore leaves each of said defendants to set forth and disclose their respective claims as they may be advised. But, nevertheless, PLAINTIFF avers that whatever

right, title, interest or lien the defendants or each of them assert or claim in, to or upon said lands, or any part thereof, was acquired with full knowledge of the said Act of Congress approved July 27, 1866, and of said Joint Resolution of Congress approved June 28, 1870, and with full knowledge and notice of the fraud so as aforesaid perpetrated upon the PLAINTIFF and that such alleged rights, titles, interests or liens [21A] are, and each of them is without right and void and should be so in equity decreed in favor of the PLAINTIFF and that the same should be voided by decree of this Honorable Court.

In consideration whereof, and for as much as the plaintiff is without full or adequate remedy in the premises save in a court of equity, and to the end that the defendants. The Southern Pacific Company, The Southern Pacific Railroad Company, Homer S. King, James K. Wilson, The Central Trust Company of New York, The Equitable Trust Company of New York, and the Kern Trading and Oil Company, may make full, true and direct answer to all and singular the matters and things hereinbefore set out, as fully as if each of them had been particularly interrogated thereunto, but not under oath, an answer under oath being hereby expressly waived; and to the end that the said patent issued, as aforesaid, may be declared null and void, and be set aside, revoked and held for naught, and be surrendered by the defendants, under the court's command, for cancellation; and that all and singular the said described lands may be adjudged and decreed to be the perfect property of the PLAINTIFF free and clear of all claims of the defendants or either or any of them; and that the defendants and each of them, during the progress of this cause, and thereafter finally and perpetually may be enjoined from setting up any claim to the said lands or any part thereof, and from creating any cloud upon the plaintiff's title thereto or any part thereof, and from digging or mining or asporting any minerals therefrom, or otherwise committing waste or damage thereto; and that the PLAINTIFF may have such other and further relief as may seem just to this Honorable Court and agreeable to equity and good conscience.

May it please your Honors to grant unto the PLAINTIFF a writ of subpoena, to be directed to the said The Southern Pacific Company, The Southern Pacific Railroad Company, Homer S. King, James K. Wilson, The Central Trust Company of New York, [22A] The Equitable Trust Company of New York, and the Kern Trading and Oil Company, thereby commanding them and each of them, at a certain time and under a certain penalty therein to be limited, to appear before this Honorable Court and then and there full, true and direct answer make to all and singular the premises, and to stand to perform and abide by such order, direction and decree as may be made against them or either or any of them in the premises as shall seem meet and agreeable to equity.

GEORGE W. WICKERSHAM, Attorney General of the United States.

A. I. McCORMICK,

United States Attorney for the Southern District of California.

WILLIS N. MILLS,

Spel Asst. to the Atty Gen'l. Of Counsel.

[23A]

EXHIBIT A.

The United States of America

To all to whom these presents shall come, Greeting: Whereas, by the Act of Congress approved July 27, 1866, and Joint Resolution of June 28, 1870, "to aid in the construction of a Railroad and Telegraph Line from the States of Missouri and Arkansas to the Pacific Coast," and to secure to the Government the use of the same for Postal, Military and other purposes, authority is given to the Southern Pacific Railroad Company of California, a corporation existing under the laws of said State, to construct a Railroad and Telegraph Line under certain conditions and stipulation expressed in said Act. from the City of San Francisco to a point of connection with the Atlantic and Pacific Railroad near the boundary line of said State, and provision is made for granting to the said Company, "every alternate section of public land, not mineral, designated by odd numbers, to the amount of ten alternate section per mile on each side of said railroad, on the line thereof, and within the limits of twenty miles

on each side of said road, not sold, reserved, granted, or otherwise appropriated by the United States, and free from pre-emption or other claims, or right, at the time the line of said road is definitely fixed; and

Whereas, it is further provided by said Act that "whenever prior to said time any of said sections or parts of sections shall have been granted, sold, reserved, occupied by homestead settlers or preemption, or otherwise disposed of, other lands shall be selected by said Company in lieu thereof under the direction of the Secretary of the Interior, in alternate sections and designated by odd numbers, not more than ten miles beyond the limits of said alternate sections and not included in the reserved numbers," and [24A]

Whereas, it has been shown by evidence filed in the Department of the Interior that the entire line of the Southern Pacific (main line) Railroad and Telegraph from San Jose to The Needles on the Colorado River, except that portion between Tres Pinos and Alcalde, which was declared forfeited by the Act of September 29, 1890, has been constructed and fully completed and equipped in the manner prescribed by said Act of July 27, 1866, and accepted; and

Whereas, it is shown by certain papers filed in the office of the Commissioner of the General Land Office by the duly authorized Attorney of the Southern Pacific Railroad Company with his letter of April 30, 1902, that said Southern Pacific Railroad Company is the successor by consolidation of the South-

ern Pacific Railroad Company of California; and

Whereas, the following tracts have been selected under the Acts aforesaid by the duly authorized land agent of the said Southern Pacific Railroad Company of California, or its successor, as shown by his original list approved by the local officers and now on file in the General Land Office; and

Whereas, the said tracts of land lie coterminous to the constructed line of said road, and are particularly described as follows, to-wit:

South of base line and East of Mount Diablo Meridian, State of California, Township Thirty, Range Twenty-three, All of section fifteen, containing six hundred and forty acres. The lots numbered one, two, three, four, five, six, seven, eight, nine, ten, eleven and twelve of section seventeen, containing four hundred and sixty-four acres and forty-nine hundredths of an acre. The lots numbered three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen and fourteen, of section nineteen, containing four hundred and seventy-one acres and thirtysix hundredths of an acre. All of [25A] section twenty-one, containing six hundred and forty acres. All of section twenty-three, containing six hundred and forty acres. The lots numbered one, two, three, four, five, six, seven, eight, nine, ten, eleven and twelve, and the West half of section twenty-five, containing six hundred and ninety-three acres, and thirty-two hundredths of an acre. All of section twenty-seven, containing six hundred and forty acres. All of section twenty-nine, containing six

hundred and forty acres. All of section thirty-three, containing six hundred and forty acres. All of section thirty-five, containing six hundred and forty acres.

The said tracts of land as described in the foregoing make the aggregate area of six thousand one hundred and nine acres and seventeen hundredths of an acre, (6,109.17).

Now Know Ye, that the United States of America, in consideration of the premises and pursuant to the said Acts of Congress, Have Given and Granted and by these presents Do Give and Grant, unto the said Southern Pacific Railroad Company, successor in interest to the Southern Pacific Railroad Company of California, and to its successors and assigns, the tracts of land selected as aforesaid and described in the foregoing.

To Have and to Hold, the same together with all rights, privileges, immunities and appurtenances of whatever nature thereunto belonging unto the said Southern Pacific Railroad Company, and to its successors and assigns forever.

In testimony whereof, I, Theodore Roosevelt, President of the United States of America, have caused these letters to be made patent and the Seal of the General Land Office to be hereunto affixed.

[26A]

Given under my hand at the City of Washington this twelfth day of December in the year of our Lord, one thousand nine hundred and four and of the United States States the one hundred and twenty-ninth.
[Seal] T. ROOSEVELT,

By the President:

F. M. McKEAN,

Secretary.

C. H. BRUSH,

Recorder of the General Land Office.

[Endorsed]: Original No. 221. In the Circuit Court of the United States for the Sou. Dist. of California, Northern Division United States of America, Ptff., vs. The Southern Pacific Company et al., Defts., Bill of Complaint (in Equity). Geo. W. Wickersham, Attorney General; A. I. McCormick, U. S. Attorney, Solicitors for Plaintiff. Filed Dec. 10, 1910. Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy.

[27A]

Case No. 221.

IN THE CIRCUIT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA,

NORTHERN DIVISION.

UNITED STATES OF AMERICA, Plaintiff,

VS.

SOUTHERN PACIFIC COMPANY, et al.,

Defendants.

IN EQUITY.

Joint and Several Answer of all Defendants other than the Equitable Trust Company of New York.

The defendants, Southern Pacific Company, Southern Pacific Railroad Company, Homer S. King,

James K. Wilson, Trustees, Central Trust Company of New York, and Kern Trading and Oil Company, jointly and severally, now and at all times saving unto themselves all and all manner of benefit and advantage of exception, or otherwise, that can or may be had or taken to the many errors, uncertainties and imperfections in the said Bill of Complaint (hereinafter referred to as "the Bill") contained, make the following Joint and Several Answer thereto, or to so much and such parts thereof as they are advised it is material or necessary for them or any of them to make answer to.

I.

It is true, as alleged in the Bill, that the defendant Southern Pacific Company, is a corporation, organized and existing under and by virtue of the laws of the State of Kentucky, and a citizen and resident of that State. [28A]

The defendant Southern Pacific Railroad Company is a corporation organized and existing under the laws of the State of California and Territories of Arizona and New Mexico, and a citizen and resident of the State of California; but except as aforesaid it is not true, as stated in the Bill, that the said defendant is a corporation organized and existing under the laws of the State of California.

The defendants Homer S. King and James K. Wilson are citizens and residents of the State of California, and are the surviving Trustees under a deed of trust or mortgage, executed by the Southern Pacific Railroad Company, bearing date April 1,

1875, purporting to and which did secure the payment of \$46,000,000 of the corporate bonds of said Southern Pacific Railroad Company; which trust deed or mortgage is claimed to be and is a lien upon the lands involved in this suit. But it is not true, as stated in the Bill, that the Southern Pacific Railroad Company which executed the said trust mortgage is the Southern Pacific Railroad Company defendant in this suit.

The defendant Central Trust Company of New York is a corporation organized and existing under and by virtue of the laws of the State of New York, and a citizen and resident of that State. The said Central Trust Company is sole Trustee under a trust deed or mortgage executed by the hereinbefore mentioned Southern Pacific Railroad Company and the defendant Southern Pacific Company unto it (the said Central Trust Company of New York) as Trustee, bearing date September 15th, 1893, purporting to and which did secure the payment of \$58,000,000 of the corporate bonds issued and to be issued by the said Southern Pacific Railroad Company; and the said Central Trust Company of New York is also sole Trustee under a supplemental trust deed or mortgage executed by the said Southern Pacific Railroad Company and the Southern Pacific Company unto it (the said Central Trust Company of New York), bearing date August 18th, 1898, [29A] amending the said former trust deed or mortgage of September 15th, 1893, so as to restrict the amount of bonds authorized to be issued thereunder to \$30,000,000;

which trust deeds or mortgages are claimed to, and do, constitute liens upon the lands involved in this suit. But it is not true, as stated in the Bill, that the Southern Pacific Railroad Company which executed the said trust deeds or mortgages, or either thereof, is the Southern Pacific Railroad Company defendant in this suit.

The defendant Equitable Trust Company of New York is a corporation organized and existing under and by virtue of the laws of the State of New York, and a citizen and resident of that State. The said defendant is sole Trustee under a deed of trust or mortgage executed by the defendants Southern Pacific Railroad Company and Southern Pacific Company to it (the said Equitable Trust Company of New York) as Trustee, bearing date January 3rd, 1905, purporting to and which did secure the payment of \$88,502,000 of refunding bonds issued and to be issued by the defendant Southern Pacific Railroad Company; but the said trust deed or mortgage is not in fact, nor is it claimed to constitute, nor is it held to be, a lien upon the lands involved in this suit.

The defendant Kern Trading & Oil Company is a corporation organized and existing under and by virtue of the laws of the State of California, and a citizen and resident of that State.

П.

The Act of Congress approved July 27th, 1866, entitled "An Act granting lands to aid in the construction of a railroad and telegraph line from the States of Missouri and Arkansas to the Pacific Coast," granted unto the Southern Pacific Railroad Company, referred to and named in Section 18 of the said Act as, and which was, a Railroad Company incorporated under the laws of the State of California, a grant of franchises, privileges, [30A] and lands including the lands involved in this suit; which Act of Congress, as published in Volume 14, United States Statutes at Large, pages 292 and following, is hereby made a part of this Answer, by reference.

These defendants ask that, by the order of this Court, all of subdivision "II" of the Bill, except the first paragraph thereof, be expunged therefrom as unnecessary haec verba recitation.

Ш.

By Joint Resolution of Congress, approved June 28th, 1870, entitled "Joint Resolution concerning the Southern Pacific Railroad of California," the said Southern Pacific Railroad Company, of California, was authorized to construct its railroad, provided for by the said Act of July 27th, 1866, as nearly as may be on the route indicated on the map filed by said Company in the Department of the Interior on January 3rd, 1867; which Joint Resolution, as published in Volume 16, United States Statutes at Large, pages 382 and following, is hereby made a part of this Answer, by reference.

These defendants ask that, by the order of this Court, all of subdivision "III" of the Bill except the

first paragraph thereof, be expunged therefrom as unnecessary haec verba recitation.

IV.

On or about March 10th, 1902, (not on or about March 10th, 1901, as erroneously stated in the Bill) such proceedings were duly had and taken as that the defendant Southern Pacific Railroad Company became the successor of the Southern Pacific Railroad Company mentioned in and to which the lands involved in this suit were granted by the said Act of July 27th, 1866, and Joint Resolution of June 28th, 1870, in ownership of all rights, privileges, franchises, lands and other property of the said [31A] Southern Pacific Railroad Company, including ownership of the lands involved in this suit subject to the trust deeds or mortgages hereinbefore set forth, other than the said trust deed or mortgage to the Equitable Trust Company of New York.

V.

During the year 1904, but prior to August 31st, 1904, the defendant Southern Pacific Railroad Company, as successor of the Southern Pacific Railroad Company named in Section 18 of the said Act of Congress of July 27th, 1866, made application in the manner and form required by law and the rules and regulations prescribed by the Secretary of the Interior, for a patent from the United States for the lands described in subdivision "V" of the Bill, under and in pursuance of the provisions of the said

Act of July 27th, 1866, and Joint Resolution of June 28th, 1870.

VI.

These defendants say, upon information which they believe to be true, that the true facts and particulars respecting the matters and things set forth in subdivision "VI" of the Bill, are as follows:

No land described in subdivision "V" of the Bill is, or at any time was, known to be, discovered to be, nor did it nor does it appear to be, mineral land or land containing mineral deposits in appreciable or paying quantities; and they deny that any of said land was, or is, excepted or excluded as mineral land, or otherwise, from the grant of lands made unto the said Southern Pacific Railroad Company by the Act of July 27th, 1866, and Joint Resolution of June 28th, 1870.

These defendants are informed and believe that the list of land referred to in subdivision "VI" of the Bill, was lawfully, truthfully and sincerely made and filed, for the purposes therein set forth and none other, in all respects conforming to the rules [32A] and regulations of the Interior Department governing such matters; and these defendants are informed and believe that the affidavit referred to in subdivision "VI" of the Bill as having been made by Charles W. Eberlein in support of the defendant Southern Pacific Railroad Company's said application for patent for the lands involved in this suit, was and is true and correct in all particulars, and that officials of the United States were not and

could not have been deceived or raisied by any statements made in that affidavit.

These defendants further say, on information which they believe to be true, that all allegations made in subdivision "VI" of the Bill, in anywise contrary to or contradictory of the foregoing allegations of this subdivision "VI" of this Answer, are untrue and scandalous.

VII.

The true facts and particulars as to the matters and things set forth in subdivision "VII" of the Bill, are as follows:

During the month of February, 1900, the lands described in subdivision "V" of the Bill, were by the Commissioner of the General Land Office suspended from non-mineral entry, upon representations made to him that the said lands contained mineral; thereafter the said Commissioner investigated the character of said land for minerals by and through Special Agents of his Department, appointed by him for the purpose of examining and who these defendants are informed and believe did examine the said land for the purpose of ascertaining and reporting its true character for minerals contained, and who duly reported to the Commissioner that they had carefully examined the said land and found no indication that minerals of any kind existed in any of said land; whereupon, in February, 1904, the said Commissioner adopted and approved the said Special Agents' report, and declared all of the said land free from suspension and subject [33A] to entry as agricultural land.

By order made and entered on December 10th. 1903, about one year prior to issuance of the patent referred to in subdivision "VII" of the Bill, the Secretary of Interior duly and properly adjudged that no clause excepting or reserving mineral land could be lawfully inserted in patents for railroad land-grant lands, and directed that thereafter no such clause should be inserted in any such patents: and these defendants are informed and believe that the uniform practice of the United States officers, continuously since the order of December 10th, 1903. was made, has been to issue all railroad land-grant patents free of any clause or provision excepting, excluding or reserving, mineral lands. The said judgment and order of December 10th, 1903, as published in Vol. XXXII, Decisions of the Department of the Interior, pages 342 and following, is made part of this Answer by reference.

These defendants are advised and believe that the said patent was duly and lawfully issued, in proper form, without inadvertence, or mistake; and upon information and belief they say that all allegations in subdivision "VII" of the Bill, contrary to or contradictory of the foregoing statements of this subdivision "VII" of this Answer, are erroneous and untrue.

VIII.

The defendant Southern Pacific Railroad Company is sole owner, under and in virtue of the United States patent a copy of which is attached to the Bill, and under and in virtue of the Acts of Congress and Joint Resolution therein referred to, of all lands described in the said attached copy, subject to the lien of the trust deeds or mortgages hereinbefore set forth, other than the said trust deed or mortgage to the Equitable Trust Company of New York; and the United States has no right, title or interest whatsoever, in or to the said lands, or any part thereof. [34A]

The defendant Southern Pacific Company does not, nor does the defendant Kern Trading & Oil Company, own or hold any right, title or interest in or to any of the said lands; and all material allegations of subdivision "VIII" of the Bill respecting or relating to the said two defendants, are untrue.

IX.

The defendant Southern Pacific Railroad Company is the owner (subject to the liens of the aforesaid mortgages other than the Equitable Trust Company mortgage), in possession and entitled to the possession of, and entitled to extract all minerals and mineral deposits (if any there be therein or thereon) from, the lands described in subdivision "V" of the Bill; and these defendants deny that the possession of said lands, or the extraction of mineral or mineral deposits (if any there be therein or thereon) therefrom, by any or all of the defendants, would be trespass or waste as against plaintiff, or would in anywise injure or concern the plaintiff.

X.

These defendants, jointly and severally, deny all and all manner of matter, cause or thing in the said Bill contained, material or necessary for them or any of them to make answer to and not herein well and sufficiently answered, traversed, avoided or denied, is true to their knowledge or belief.

All of which matters and things these defendants are ready and willing to aver, maintain and prove, as this Court may direct; and they pray to be hence dismissed, with their reasonable costs and charges in this behalf most wrongfully sustained.

GUY V. SHOUP and D. V. COWDEN,
Attorneys for the said Defendants.
WM. SINGER, JR.,
JOLINE, LARKIN & RATHBONE,
Counsel for the said Defendants.

[35A]

State of California,

City and County of San Francisco,-ss.

G. L. King, being duly sworn, deposes and says: That he is Secretary of the Southern Pacific Railroad Company, the principal defendant to the foregoing Answer; that he has read the foregoing Answer and knows the contents thereof; that the allegations therein contained, so far as they relate to his own acts and deeds are true, and so far as they relate to the acts and deeds of others he believes them to be true; and that he has been informed as to the matters and things alleged and denied in the foregoing Answer which are not within his knowledge, and he

believes all such allegations and denials to be true. G. S. KING.

Subscribed and sworn to before me on April 5th, 1911. E. B. RYAN,

Notary Public in and for the City and County of San [Seal] Francisco, State of California.

[36A]

State of California,

City and County of San Francisco,-ss.

Fred Brauns, being duly sworn, deposes and says: That he is Chief Clerk in the office of Wm. Singer, Jr., Room 842 Flood Building, San Francisco, California, General Land Attorney for the defendant Southern Pacific Railroad Company, and Counsel for all defendants joined as such in the foregoing Answer; that he (affiant) this day deposited in the United States mail at San Francisco, California, a full and correct copy of the foregoing Answer, enclosed by a sealed envelope, postage prepaid, addressed as follows: "Mr. A. I. McCormick, United States Attorney, Los Angeles, California."

FRED BRAUNS.

Subscribed and sworn to before me on April 5th, 1911. E. B. RYAN,

Notary Public in and for the City and County of San [Seal] Francisco, State of California.

[Endorsed]: No. 221. U. S. Circuit Court, Southern District of California, Northern Division, United States of America, vs. Southern Pacific Company, et al. Joint and Several Answer of all Defendants other than the Equitable Trust Company. Guy V.

Shoup and D. V. Cowden, Attorney for Defendants, Room 842, Flood Building, San Francisco. Filed April 6, 1911, Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. [37A]

At a stated term, to wit: The January Term, A. D. 1912, of the District Court of the United States of America, in and for the Southern District of California, Northern Division, held at the court room thereof, in the city of Los Angeles, on Thursday, the twenty-eighth day of March, in the year of our Lord One Thousand Nine Hundred and Twelve:

Present: The Honorable Olin Wellborn, District Judge.

THE UNITED STATES OF AMERICA,

Complainants,

VS.

THE SOUTHERN PACIFIC COMPANY, a corporation, et al.,

Defendants.

C. C. No. 221, Northern Division.

Amended per minute order of April 10th, C. E. Scott, Deputy Clerk.

It appearing that in the opinion of the Honorable Olin Wellborn, Judge of this court, it is improper for him to sit on the trial of this cause, now in the application of A. I. McCormick, Esq., U. S. Attorney, the Court directs the United States Attorney for this District to prepare an order accordingly for entry herein and subsequent certification to the senior Circuit Judge for the Ninth Circuit, present in

the Circuit, pursuant to said Sec. 20 of the U.S. audicial Code.

O. K. C. E. S. 3-28-12 pl [38A]

At a stated term, to wit: The January Term, A. D. 1912, of the District Court of the United States of America, in and for the Southern District of California, Northern Division, held at the court room thereof, in the city of Los Angeles, on Tuesday, the 9th day of April, in the year of our Lord One Thousand Nine Hundred and Twelve:

Present: The Honorable Olin Wellborn, District Judge.

THE UNITED STATES OF AMERICA,

Complainants.

VR.

THE SOUTHERN PACIFIC COMPANY, a corporation, et al.,

Defendants.

C. C. No. 221, Northern Division.

It appearing to the court that the judge thereof, through one of his relatives, is so related to the parties defendant in the above entitled suit as to render it improper, in his opinion, for him to sit on the trial thereof; and A. I. McCormick, Esq., U. S. Attorney for the Southern District of California, of counsel for complainants, having, on the 28th day of March, 1912, by an order of this court, entered on that day, been directed to prepare an order accordingly for entry herein and subsequent certification to the senior Circuit Judge for the Ninth Circuit,

present in the Circuit, pursuant to Section 20 of the United States Judicial Code;

Now, therefore, on the application of said A. I. McCormick, Esq., U. S. Attorney for this District, and of counsel for complainants, the foregoing fact is entered on the records of this court, and it is ordered that an authenticated copy hereof be forthwith certified to the senior Circuit Judge for this Circuit, present in the Circuit. [39A]

O. K. C. E. S. 4-9-12. p. l.

At a Special Term of the District Court of the United States, for the Southern District of California, Northern Division, held in the "Circuit Court" Room, in the Federal Building, in the City of Los Angeles, on Monday, the eighteenth day of January, in the year of our Lord One Thousand Nine Hundred and Fifteen.

Present: The Honorable Robert S. Bean, District Judge.

THE UNITED STATES OF AMERICA,
Complainants.

vs.

SOUTHERN PACIFIC COMPANY, et al., Defendants.

C. C. No. 221, Northern Division.

Good cause appearing therefor, it is ordered that the following order, heretofore made and filed herein, be spread in full upon the minutes of this Court, to wit: "IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DIS-TRICT OF CALIFORNIA, NORTHERN DIVIS-ION.

"United States of America, Plaintiff, vs. Southern Pacific Company, et al., Defendants. No. 221 in Equity.

"In pursuance of stipulation of the parties, and order made by Honorable R. S. Bear, United States District Judge, heretofore filed herein, on the 5th day of October, 1914, fixing January 18, 1915, at Los Angeles, California, in said District, as the time and place for the hearing of final argument in, and the determination of, the above entitled matter, it appearing to me that the nature of said business requires;

IT IS HEREBY ORDERED that a special term of this Court be begun and held at Los Angeles, California, on January 18, 1915.

"Done at Fresno, California, this 18th day of November, 1914.

"Benjamin F. Bledsoe, District Judge." [40A]

[Endorsed]: "C. C. No. 221. United States District Court, Southern District of California, Northern Division. United States of America vs. Southern Pacific Company, et al., Order for Special Term. Filed November 18, 1914. Wm. M. Van Dyke, Clerk. By C. E. Scott, Deputy Clerk." [41A]

At a stated term, to wit: The Special Term of the District Court of the United States, for the Southern District of California, Northern Division, held in the "Circuit Court" Room thereof, in the City of Los Angeles, on Monday, the Eighteenth day of January, in the year of our Lord, One Thousand Nine Hundred and Fifteen.

Present: The Honorable Robert S. Bean, District Judge.

THE UNITED STATES OF AMERICA,
Complainants.

VS.

THE SOUTHERN PACIFIC COMPANY, et al.,
Defendants.

C. C. No. 221, Northern Division.

Good cause appearing therefor, it is ordered that the following stipulation and order herein be spread in full upon the minutes of this court, to wit:

"IN THE DISTRICT COURT OF THE UNITED STATES IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

"United States of America, Complainant, vs. The Southern Pacific Company, et al., Defendants. In Equity No. 221.

"STIPULATION.

"WHEREAS, the Honorable Olin Wellborn, United States District Judge for the Southern District of California, wherein said cause is pending, on to wit: April 9th, 1912, caused to be entered in the records of said Court his opinion that he was disqualified to try said above entitled cause, and thereupon ordered that an authenticated copy of the said opinion be certified to the Senior Circuit Judge of the 9th Circuit, and

"WHEREAS, the Clerk of said Court, did, on April 10, 1912, forward to the said Senior Circuit Judge a certified copy of said order of April 9th, 1912, and [42A]

"WHEREAS, the said Senior Circuit Judge for said 9th Circuit did thereupon appoint and designate Honorable Robert S. Bean, United States District Judge for the District of Oregon in said 9th Circuit, to try said cause for the reasons assigned in said opinion and order of the Honorable Olin Wellborn, and

"WHEREAS, on December 12, 1913, all of the testimony and proofs on behalf of both the plaintiff and the defendants in the above entitled cause having been put in and fully and finally completed, ready for submission by oral argument to the Court, and

"WHEREAS, on, to wit: November 5th, 1913, said above entitled cause was placed on the term trial calendar for the November Term of 1913, and

"WHEREAS, it is the desire of both the plaintiff and the defendants in said cause to argue said cause at the earliest available date, and

"WHEREAS, the said Honorable Robert S. Bean, United States District Judge in charge of the conduct of and the final determination of said cause has indicated that he will hear final arguments therein at Los Angeles, California, in one of the United States Court Rooms of the Federal Building of that city, on, to wit: Monday, the 18th day

of January, 1915, and such following days as are necessary to complete said arguments, and

"WHEREAS, the time so fixed by the Court for the arguments of counsel is satisfactory and convenient to all the parties to said cause, and it is the desire of couusel both for the plaintiff and the defendants to have said cause heard at said time and place;

"It is hereby stipulated by and between each and all of the parties to said suit, and their solicitors, that said cause be heard and determined at the time and place so fixed by the Court as aforesaid, to wit: at Los Angeles, California, on the 18th day of January, 1915. [43A]

"Dated this 1st day of October, 1914.

"T. W. Gregory, Attorney General of the United States.

"W. N. Mills, Special Assistant to the Attorney General.

"Solicitors for Plaintiff.

"Charles R. Lewers, Guy V. Shoup,

"Solicitors for all Defendants other than the Equitable Trust Company of New York.

"J. W. McKinley,

"Solicitor for defendant Equitable Trust Company of New York.

"It is so ordered:

"R. S. BEAN,

"United States District Judge."

[Endorsed]: "Equity No. 221. In the District Court of the United States for the Southern District of California, Northern Division, United States of America, Complainant, vs. The Southern Pacific Company, et al., Defendants. Stipulation and order. Filed Oct. 5, 1914. Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk." [44A]

Case No. 221.

IN THE CIRCUIT COURT OF THE UNITED STATES, NINTH CIRCUIT SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA,

Plaintiff.

VS.

SOUTHERN PACIFIC COMPANY, et al., Defendants.

IN EQUITY.

ANSWER OF DEFENDANT, THE EQUITABLE TRUST COMPANY OF NEW YORK.

The defendant, The Equitable Trust Company of New York, now, and at all times, saving unto itself all and all manner of benefit and advantage of exception, or otherwise, that can or may be had or taken to the many errors, uncertainties and imperfections in the said Bill of Complaint (hereinafter referred to as "the Bill") contained, makes the following answer thereto, or to so much and such parts thereof as it is advised it is material or necessary for it to make answer to.

T

It is true, as alleged in the Bill, that the defendant Southern Pacific Company is a corporation, organized and existing under and by virtue of the laws of the State of Kentucky, and a citizen and resident of that State. [45A]

The defendant Southern Pacific Railroad Company is a corporation organized and existing under the laws of the State of California and Territories of Arizona and New Mexico, and a citizen and resident of the State of California; but except as aforesaid it is not true, as stated in the Bill, that the said defendant is a corporation organized and existing under the laws of the State of California.

The defendants Homer S. King and James K. Wilson are citizens and residents of the State of California, and are the surviving Trustees under a deed of trust or mortgage, executed by the Southern Pacific Railroad Company, bearing date April 1st, 1875, purporting to and which did secure the payment of \$46,000,000 of the corporate bonds of said Southern Pacific Railroad Company; which trust deed or mortgage is claimed to be and is a lien upon the lands involved in this suit. But it is not true, as stated in the Bill, that the Southern Pacific Railroad Company which executed the said trust mortgage is the Southern Pacific Railroad Company defendant in this suit.

The defendant Central Trust Company of New York is a corporation organized and existing under and by virtue of the laws of the State of New York,

and a citizen and resident of that State. The said Central Trust Company is sole Trustee under a trust deed or mortgage executed by the hereinbefore mentioned Southern Pacific Railroad Company and the defendant Southern Pacific Company unto it (the said Central Trust Company of New York) as Trustee, bearing date September 15th, 1893, purporting to and which did secure the payment of \$58,000,000 of the corporate bonds issued and to be issued by the said Southern Pacific Railroad Company; and the said Central Trust Company of New York is also sole Trustee under a supplemental trust deed or mortgage executed by the said Southern Pacific Railroad Company and Southern Pacific Company unto it (the said Central [46A] Trust Company of New York), bearing date August 18th, 1898, amending the said former trust deed or mortgage of September 15th, 1893, so as to restrict the amount of bonds authorized to be issued thereunder to \$30,000,-000; which trust deeds or mortgages are claimed to, and do, constitute liens upon the lands involved in this suit. But it is not true, as stated in the Bill. that the Southern Pacific Railroad Company which executed the said trust deeds or mortgages, or either thereof, is the Southern Pacific Railroad Company defendant in this suit.

The defendant The Equitable Trust Company of New York is a corporation organized and existing under and by virtue of the laws of the State of New York, and a citizen and resident of that State. The said defendant is sole Trustee under a deed of trust

or mortgage executed by the defendants Southern Pacific Railroad Company and Southern Pacific Company to it (the said The Equitable Trust Company of New York) as Trustee, bearing date January 3rd, 1905, purporting to and which did secure the payment of \$88,502,000 of refunding bonds issued and to be issued by the defendant Southern Pacific Railroad Company; which trust deed or mortgage is claimed by the other defendants to this suit not to constitute a lien upon the lands involved in this suit; but this defendant alleges that it does not know and cannot set forth as to its belief or otherwise as to whether said trust deed or mortgage does or does not constitute a lien upon said lands and this defendant submits to this court for its determination as a matter of fact and law the question whether such trust deed or mortgage does or does not constitute a lien upon said lands.

The defendant Kern Trading & Oil Company is a corporation organized and existing under and by virtue of the laws of the State of California, and a citizen and resident of that State. [47A]

П.

The Act of Congress approved July 27th, 1866, entitled "An Act granting lands to aid in the construction of a railroad and telegraph line from the States of Missouri and Arkansas to the Pacific Coast," granted unto the Southern Pacific Railroad Company, referred to and named in Section 18 of the said Act as, and which was, a Railroad Company incorporated under the laws of the State of Califor-

nia, a grant of franchises, privileges and lands, including the lands involved in this suit; which Act of Congress, as published in Volume 14, United States Statutes at Large, pages 292 and following, is hereby made a part of this Answer, by reference.

This defendant asks that, by the order of this Court, all of subdivision "II" of the Bill, except the first paragraph thereof, be expunged therefrom as unnecessary haec verba recitation.

Ш.

By Joint Resolution of Congress, approved June 28th, 1870, entitled "Joint Resolution concerning the Southern Pacific Railroad of California," the said Southern Pacific Railroad, of California, was authorized to construct its railroad, provided for by the said Act of July 27th, 1866, as nearly as may be on the route indicated on the map filed by said Company in the Department of the Interior on January 3rd, 1867; which Joint Resolution, as published in Volume 16, United States Statutes at Large, pages 382 and following, is hereby made a part of this Answer, by reference.

This defendant asks that, by the order of this Court, all of subdivision "III" of the Bill except the first paragraph thereof, be expunged therefrom as unnecessary haec verba recitation. [48A]

IV.

On or about March 10th, 1902, (not on or about March 10th, 1901, as erroneously stated in the Bill), such proceedings were duly had and taken as that the defendant Southern Pacific Railroad Company

became the successor of the Southern Pacific Railroad Company mentioned in and to which the lands involved in this suit were granted by the said Act of July 27th, 1866, and Joint Resolution of June 28th, 1870, in ownership of all rights, privileges, franchises, lands and other property of the said Southern Pacific Railroad Company, including ownership of the lands involved in this suit subject to the trust deeds or mortgages hereinbefore set forth.

V.

During the year 1904, but prior to August 31st, 1904, the defendant Southern Pacific Railroad Company, as successor of the Southern Pacific Railroad Company named in Section 18 of the said Act of Congress of July 27th, 1866, made application in the manner and form required by law and the rules and regulations prescribed by the Secretary of the Interior, for a patent from the United States for the lands described in subdivision "V" of the Bill, under and in pursuance of the provisions of the said Act of July 27th, 1866, and Joint Resolution of June 28th, 1870.

VI.

This defendant says upon information which it believes to be true, that the true facts and particulars respecting the matters and things set forth in subdivision "VI" of the Bill, are as follows:

No land described in subdivision "V" of the Bill is, or at any time was, known to be, discovered to be, nor did it nor does it appear to be, mineral land or land containing mineral deposits in appreciable or paying quantities; and it denies that any of [49A] said land was, or is, excepted or excluded as mineral lands, or otherwise, from the grant of lands made unto the said Southern Pacific Railroad Company by the Act of July 27th, 1866, and Joint Resolution of June 28th, 1870.

This defendant is informed and believes that the list of land referred to in subdivision "VI" of the Bill, was lawfully, truthfully and sincerely made and filed, for the purposes therein set forth and none other, in all respects conforming to the rules and regulations of the Interior Department governing such matters; and this defendant is informed and believes that the affidavit referred to in subdivision "VI" of the Bill as having been made by Charles W. Eberlein in support of the defendant Southern Pacific Railroad Company's said application for patent for the lands involved in this suit, was and is true and correct in all particulars, and that officials of the United States were not and could not have been deceived or misled by any statements made in that affidavit.

This defendant further says, on information which it believes to be true, that all allegations made in subdivision "VI" of the Bill, in anywise contrary to or contradictory of the foregoing allegations of this subdivision "VI" of this Answer, are untrue and scandalous.

VII.

The true facts and particulars as to the matters

and things set forth in subdivision "VII" of the Bill, are as follows:

During the month of February, 1900, the lands described in subdivision "V" of the Bill, were by the Commissioner of the General Land Office suspended from non-mineral entry, upon representations made to him that the said lands contained mineral; thereafter the said Commissioner investigated the character [50A] of said land for minerals by and through Special Agents of his Department, appointed by him for the purpose of examining and who this defendant is informed and believes did examine the said land for the purpose of ascertaining and reporting its true character for minerals contained, and who duly reported to the Commissioner that they had carefully examined the said land and found no indication that minerals of any kind existed in any of said land; whereupon, in February, 1904, the said Commissioner adopted and approved the said Special Agent's report, and declared all of the said land free from suspension and subject to entry as agricultural land.

By order made and entered on December 10th, 1903, about one year prior to issuance of the patent referred to in subdivision "VII" of the Bill, the Secretary of the Interior duly and properly adjudged that no clause excepting or reserving mineral land could be lawfully inserted in patents for railroad land-grant lands, and directed that thereafter no such clause should be inserted in any such patents; and this defendant is informed and believes that the

uniform practice of the United States officers, continuously since the order of December 10th, 1903, was made, has been to issue all railroad land-grant patents free of any clause or provision excepting, excluding or reserving, mineral lands. The said judgment and order of December 10th, 1903, as published in Vol. XXXII, Decisions of the Department of the Interior, pages 342 and following, is made part of this Answer by reference.

This defendant is advised and believes that the said patent was duly and lawfully issued, in proper form, without inadvertence, or mistake; and upon information and belief it says that [51A] all allegations in subdivision "VII" of the Bill, contrary to or contradictory of the foregoing statements of this subdivision "VII" of this Answer, are erroneous and untrue.

VIII.

The defendant Southern Pacific Railroad Company is sole owner, under and in virtue of the United States patent, a copy of which is attached to the Bill, and under and in virtue of the Acts of Congress and Joint Resolution therein referred to, of all lands described in the said attached copy, subject to the lien of the trust deeds or mortgages hereinbefore set forth, and the United States has no right, title or interest whatsoever in or to the said lands, or any part thereof.

The defendant Southern Pacific Company does not, nor does the defendant Kern Trading & Oil Company, own or hold any right, title or interest in or to any of the said lands; and all material allegations of subdivision "VIII" of the Bill respecting or relating to the said two defendants, are untue.

IX.

The defendant Southern Pacific Railroad Company is the owner (subject to the liens of the aforesaid mortgages) in possession and entitled to the possession of, and entitled to extract all minerals and mineral deposits (if any there be therein or thereon) from the lands described in subdivision "V" of the Bill; and this defendant denies that the possession of said lands, or the extraction of mineral or mineral deposits (if any there be therein or thereon) therefrom, by any or all of the defendants, would be trespass or waste as against plaintiff, or would in anywise injure or concern the plaintiff. [52A]

X.

This defendant denies all and all manner of matter, cause or thing in the said Bill contained, material or necessary for it to make answer to and not herein well and sufficiently answered, traversed, avoided or denied, is true to its knowledge or belief.

All of which matters and things this defendant is ready and willing to aver, maintain and prove, as this Court may direct; and it prays to be hence dismissed, with its reasonable costs and charges in this behalf most wrongfully sustained.

JOHN QUINN,
J. W. McKINLEY,
Attorneys for the said Defendant.
JOHN QUINN,
Counsel for the said Defendant. [53A]

State of New York,
City and County of New York,—ss.

F. W. Fulle, being duly sworn, deposes and says: That he is Vice-President of The Equitable Trust Company of New York, one of the defendants mentioned in the foregoing Answer; that he has read the foregoing Answer and knows the contents thereof; that the allegations therein contained, so far as they relate to his own acts and deeds are true, and so far as they relate to the acts and deeds of others he believes them to be true; and that he has been informed as to the matters and things alleged and denied in the foregoing Answer which are not within his knowledge, and he believes all such allegations and denials to be true.

F. W. FULLE.

Subscribed and sworn to before me on May 1st, 1911.

[Seal]

VINE H. SMITH,

Notary Public Kings County.

Certificate Filed in New York County.

(Endorsed:) Case No. 221. U. S. Circuit Court, Southern District of California, Northern Division. United States of America, Plaintiff, vs. Southern Pacific Co., et al., Defendants. Answer of Defendant The Equitable Trust Company of New York. John Quinn, J. W. McKinley, Attorneys for Defendant. Rec'd Copy of the within Answer this 12th day of May, 1911.

A. I. McCormick, U. S. Atty. Filed May 12, 1911.

Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. [54A]

At a stated term, to-wit: the January Term, A. D., 1912, of the District Court of the United States of America, in and for the Southern District of California, Southern Division, held at the court room thereof, in the city of Los Angeles, on Monday, the twenty-ninth day of January, in the year of our Lord one thousand nine hundred and twelve.

Present:

The Honorable Olin Wellborn, District Judge. UNITED STATES OF AMERICA,

Complainants,

vs.

THE SOUTHERN PACIFIC COMPANY, a corporation, et al.,

Defendants.

C. C. No. 221, Northern Division.

On motion of A. I. McCormick, Esq., U. S. Attorney, and pursuant to the stipulation of the parties hereto, by their solicitors, filed herein January 13th, 1912, it is ordered that the time within which the evidence in chief for the complainants may be taken and completed be, and the same hereby is extended until and including the 31st day of May, 1912, that the defendants may have to and including the 30th day of July, 1912, within which to take and complete their testimony in said cause, and that the complainants may have to and including the 29th day of

August, 1912, within which to take and complete their testimony in rebuttal. [55A]

IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA, Complainant,

VS.

THE SOUTHERN PACIFIC COMPANY, et al.,
Defendants.

IN EQUITY NO. 221.

STIPULATION.

WHEREAS, the above entitled Court, by its minute order duly given, made and entered on the 30th day of December, 1911, under and in pursuance of a written stipulation duly and regularly signed and agreed to by each and all of the parties to the above entitled cause, and their solicitors, appointed Leo Longley, Esquire, of Los Angeles, California, as Special Examiner of said Court to take the evidence, both oral and documentary, of the respective parties in said cause, and report the same to the Court, and

WHEREAS, it is the desire of each and all of the parties to said cause to enlarge and amplify said order.

NOW, THEREFORE, IT IS HEREBY STIPU-LATED AND AGREED by and between each and all of the parties to the above entitled cause, and

their solicitors, that the evidence of plaintiff and defendants respectively, both oral and documentary, shall be taken before said Leo Longley as Special Examiner in said cause: that said evidence shall be taken by said Leo Longley as such Special Examiner in the southernmost room of the United States District Court in the Federal Building in the City of Los Angeles, California, or at such other place, either within or without the Southern District of California, as he, [56A] the said Leo Longley as such Special Examiner may be advised by the respective parties to the above entitled cause; that the said evidence so to be taken by and before the said Leo Longley, Esquire, as such Special Examiner, may be by him, the said Leo Longley, personally or by and under his supervision, taken down in shorthand and thereafter by him, the said Special Examiner, or under his supervision and direction, transcribed into typewriting; that said evidence when so taken and transcribed, together with the documentary evidence offered and introduced before him, shall be by the said Leo Longley as such Special Examiner, returned, certified and filed with the Clerk of the District Court of the United States for the Southern District of California, and said evidence, both oral and documentary, when so taken and transcribed, certified and filed, shall thereafter be considered and shall constitute the evidence in said cause.

IT IS FURTHER STIPULATED that it shall not be necessary for either or any of the witnesses

whose testimony may be taken before said Special Examiner, to read over or sign his said testimony, but the same, when so taken and transcribed, certified and filed as aforesaid, may be used with the same force and effect as if each of said witnesses had read over and signed his said testimony after the same had been transcribed.

IT IS FURTHER STIPULATED that the taking of testimony on behalf of the complainant, United States of America, shall be commenced before said Leo Longley as such Special Examiner, on Tuesday, the 16th day of April, 1912, in the said Court Room of the United States District Court at Los Angeles, above described, and shall be continued thereafter at such times and places as the said Special Examiner may be advised by the Solicitors for said Plaintiff and may direct, provided that the taking of testimony by the said Plaintiff in its case in chief shall be completed on or before the 15th day of June, 1912, and the testimony of the defendants shall be completed on or before the 15th day of August, and the taking of [57A] the testimony of the plaintiff in rebuttal shall be completed on or before the 15th day of September, 1912.

IT IS FURTHER STIPULATED AND AGREED that should either of the parties to said cause desire to take or introduce testimony before said Special Examiner at any place other than in the City of Los Angeles, California, if the parties hereto can not agree by stipulation so to do, the other parties to said cause shall be entitled to and shall have not less

than ten days notice of the time and place of the taking of such testimony or evidence.

IT IS FURTHER STIPULATED AND AGREED that an order of the above entitled Court may be made and entered in conformity with this stipulation.

Dated this 14th day of March, 1912. W. N. MILLS, of Counsel

> GEO. W. WICKERSHAM, A. I. McCORMICK, Attorneys for Plaintiff.

WM. SINGER, JR., Counsel, and GUY V. SHOUP and CHAS. R. LEWERS, Attorneys for all defendants other than the Equitable Trust Company of New York.

J. W. McKINLEY,

Attorneys for Defendant Equitable Trust Company of New York.

It is so ordered.

R. S. BEAN, Judge.

FILED AND ENTERED May 9th, 1912.

WM. 24. VAN DYKE, Clerk, By Murray C. White, Deputy Clerk. [58A] IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA, Complainant,

VS.

THE SOUTHERN PACIFIC COMPANY, et al.,
Defendants.

IN EQUITY NO. 221.

STIPULATION

WHEREAS, it is the desire of the plaintiff in the above entitled cause to take and introduce testimony before Leo Longley, as Special Examiner, at the City of Washington, District of Columbia, and

WHEREAS, the time in which the plaintiff in the above entitled cause may take its testimony and evidence expires under the Stipulation and Order now in effect on the 15th day of August, 1912, and it is the desire of the parties hereto to enlarge and extend said time as well as the time for taking the evidence of defendants and of plaintiff in rebuttal;

It is hereby stipulated and agreed by and between each and all the parties to said suit and their solicitors, as follows: That the time within which plaintiff may take and complete its testimony and evidence on its case in chief may be and the same hereby is enlarged and extended up to and including the 15th day of September, 1912, and that the tes-

timony and evidence of said defendants shall be taken and be completed by or before the 15th day of November, 1912, and the taking of the testimony and introduction of evidence in rebuttal by said plaintiff shall be completed on or before the 15th day [59A] of December, 1912.

It is further stipulated and agreed by and between each and all the parties to said suit and their solicitors that upon the adjournment of the hearing now pending before the said Leo Longley, as Special Examiner, at the court room of the United States Circuit Court of Appeals, in the Post Office Building at San Francisco, California, the further taking of testimony on behalf of the plaintiff in its case in chief shall start and be proceeded with on Monday, the 29th day of July, at the City of Washington, in the District of Columbia, at such hour on said day and at such place in said City as shall be designated by said Leo Longley, Special Examiner.

It is expressly understood that this stipulation shall not and is not intended to in any way change or alter the stipulation or order now in force governing the taking of the testimony and evidence in said suit except to enlarge the time and fix a date and place for the further resumption of the hearing herein as expressly stated.

It is stipulated that an order of court may be made and entered in conformity with this stipulation.

Dated this 9th day of July, 1912.

W. N. Mills,

Special Assistant to the Attorney General of the United States. Of Counsel.

Geo. W. Wickersham,
A. I. McCormick,
Attorneys for Plaintiff.
Wm. Singer, Jr.,
Chas. R. Lewers,
Guy V. Shoup.

Attorneys for all defendants other than the EQUIT-

ABLE TRUST COMPANY of New York.

J. W. McKinley, per G. V. L.

Attorneys for defendant EQUITABLE TRUST COMPANY of New York.

It is so ordered.

R. S. Bean, Judge.

FILED and entered August 12th, 1912.

Wm. M. Van Dyke, Clerk. By C. E. Scott, Deputy Clerk. [60A]

IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA, Complainant.

VS.

THE SOUTHERN PACIFIC COMPANY, et al., Defendants.

IN EQUITY. NO. 221.

STIPULATION

WHEREAS, the time in which the plaintiff in the above entitled cause may take its testimony and evidence expires under the Stipulation and Order now in effect on the 15th day of September, 1912, and it is the desire of the parties hereto to enlarge and extend said time as well as the time for taking the evidence of defendants and of plaintiff in rebuttal;

IT IS HEREBY STIPULATED AND AGREED by and between each and all of the parties to said suit and their solicitors, as follows: that the time within which plaintiff may take and complete its testimony and evidence on its case in chief may be and the same hereby is enlarged and extended up to and including the 1st day of October, 1912, and that the testimony and evidence of said defendants shall be taken and be completed by or before the 1st day of January, 1913, and the taking of the testimony and introduction of evidence in rebuttal by said plaintiff shall be completed on or before the 1st day of February, 1913.

It is further stipulated and agreed by and between each and all of the parties to said suit and their solicitors that [61A] upon the adjournment of the hearing now pending before Leo Longley, as Special Examiner, at the court room of the United States District Court for the Southern District of California, in the Post Office Building at Los Angeles, California, the further taking of testimony on behalf of the plaintiff in its case in chief shall start and be proceeded with on Tuesday, the 17th day of September, 1912, at the City of Bakersfield, in Kern County, State of California, at such hour on said day and at such place in said City as shall be designated by said Leo Longley, Special Examiner.

It is expressly understood that this stipulation shall not and is not intended to in any way change or alter the stipulation or order now in force governing the taking of the testimony and evidence in said suit except to enlarge the time and fix a date and place for the further resumption of the hearing herein as expressly stated.

It is stipulated that an order of court may be made and entered in conformity with this stipulation.

Dated this 12th day of September, 1912.

Geo. W. Wickersham, A. I. McCormick, Attorneys for Plaintiff.

W. N. Mills,

Special Assistant to the Attorney General of the United States. Of Counsel.

Guy V. Shoup, Charles R. Lewers,

Attorneys for all defendants other than the Equitable Trust Company of New York.

J. W. McKinley,

Attorneys for Defendant Equitable Trust Company of New York.

It is so ordered:

R. S. Bean, Judge.

Filed and entered September 21st, 1912.

WM. M. VAN DYKE, Clerk.

By Murray C. White, Deputy Clerk. [62A]

IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA, Complainant.

V8.

THE SOUTHERN PACIFIC COMPANY, et al., Defendants.

IN EQUITY.

NO. 221.

STIPULATION

WHEREAS, the time within which the defendants in the above entitled cause may take their testimony and evidence under the Stipulation and Order now in effect expires on the 1st day of January, 1913, and

WHEREAS, it is the desire of the defendants to have an enlargement of the time within which to take and complete the putting in of their said testimony in said cause and that the said time be extended to the defendants for said purpose until and including the 1st day of February, 1913, and

WHEREAS, under the stipulation now in force the time within which the plaintiff may introduce its testimony and evidence in rebuttal expires on the 1st day of February, 1913.

It is hereby stipulated by and between each and all of the parties to said suit and their solicitors as follows: That the time within which the defendants may take and complete their testimony and evidence in defense may be and the same hereby is

enlarged and extended up to and including the 1st day of February, 1913, at which time all of the testimony to be adduced by the defendants, and each of them, shall be fully completed and introduced and the taking of testimony and introduction of evidence in [63A] rebuttal by said plaintiff shall be completed on or before the 1st day of March, 1913.

It is expressly understood that this Stipulation shall not and is not intended to in any way change or alter the stipulation or order now in force governing the taking of testimony and evidence in said cause except to enlarge the time as aforesaid.

It is stipulated that an order of court may be made and entered in conformity with this stipulation.

Dated this 22nd day of November, 1912.

GEORGE W. WICKERSHAM, Attorney General of U. S.

A. I. McCORMICK,

U. S. Atty, Attorneys for Plaintiff.

W. N. Mills.

Special Assistant to the Attorney General of the United States. Of Counsel.

GUY V. SHOUP, CHAS. R. LEWERS,

Attorneys for all defendants other than the Equitable Trust Company of New York.

J. W. McKINLEY,

Attorney for Defendant Equitable Trust Company of New York.

It is so ordered:

R. S. Bean,

Judge.

Filed and entered December 2nd, 1912.

WM. M. VAN DYKE, Clerk.

By Chas. N. Williams, Deputy Clerk. [64A]

IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA.

Complainant,

VS.

THE SOUTHERN PACIFIC COMPANY, et al.,
Defendants.

IN EQUITY NO. 221.

STIPULATION

WHEREAS, the time within which the defendants in the above entitled cause may take their testimony and evidence under the Stipulation and Order now in effect expires on the 1st day of February, 1913, and

WHEREAS, it is the desire of the defendants to have an enlargement of the time within which to take and complete the putting in of their said testimony in said cause and that the said time be extended to the defendants for said purpose until and including the 1st day of April, 1913, and

WHEREAS, under the stipulation now in force the time within which the plaintiff may introduce its testimony and evidence in rebuttal expires on the 1st day of March, 1913.

It is hereby stipulated by and between each and all of the parties to said suit and their solicitors as follows: That the time within which the defendants may take and complete their testimony and evidence in defense may be and the same is hereby enlarged and extended up to and including the 1st day of April, 1913, at which time all of the testimony to be adduced by the defendants, and each of them, shall be fully completed and introduced and the taking of testimony and introduction of evidence in rebuttal by said plaintiff shall be completed on or before the 1st day of June, 1913. [65A]

It is expressly understood that this stipulation shall not and is not intended to in any way change or alter the stipulation or order now in force governing the taking of testimony and evidence in said cause except to enlarge the time as aforesaid.

It is stipulated that an order of Court may be made and entered in conformity with this stipulation.

Dated this 29th day of January, 1913.

GEORGE W. WICKERSHAM, A. I. McCORMICK,

Attorneys for Plaintiff.

W. N. MILLS,

Special Assistant to the Attorney General of the United States, of Counsel.

GUY V. SHOUP, CHAS. R. LEWERS,

Attorneys for all defendants other than the Equitable Trust Company of New York.

J. W. McKINLEY,

Attorneys for defendant Equitable Trust Company of New York.

It is so ordered:

Judge

[Endorsed]: No. 221. In the District Court of the

United States, for the Sou. Dist. of California, Nor. Div. United States of America, Complainant, vs. The Southern Pacific Co. et al., Defendants. Stipulation & Order. Filed Feb. 3, 1913, Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. [66A]

IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA.

Complainant,

VS.

THE SOUTHERN PACIFIC COMPANY, ET AL.,
Defendants.

IN EQUITY No. 221.

STIPULATION

WHEREAS, the time within which the defendants in the above entitled cause may take their testimony and evidence under the stipulation and order now in effect expires on the 1st day of April, 1913; and

WHEREAS, it is the desire of the defendants to have an enlargement of the time within which to take and complete the putting in of their said testimony in said cause and that the said time be extended to the defendants for said purpose until and including the 1st day of June, 1913; and

WHEREAS, under the stipulation now in force the time within which the plaintiff may introduce its testimony and evidence in rebuttal expires on the 1st day of June, 1913. It is hereby stipulated by and between each and all of the parties to said suit and their solicitors as follows: That the time within which the defendants may take and complete their testimony and evidence in defense may be and the same is hereby enlarged and extended up to and including the 1st day of June, 1913, and the further taking of testimony and introduction of evidence by said plaintiff shall be completed on or before the 1st day of October, 1913.

It is further stipulated that the defendants will not ask for further enlargement of the time for the completion of [67A] their testimony in chief except upon application to the Court and then only upon showing of good cause therefor.

It is expressly understood that this stipulation shall not and is not intended to in any way change or alter the stipulation or order now in force governing the taking of testimony and evidence in said cause except to enlarge the time as aforesaid.

It is stipulated that an order of Court may be made and entered in conformity with this stipulation.

Dated this 19th day of March, 1913.

J. C. McREYNOLDS, A. I. McCORMICK, Attorneys for Plaintiff.

W. N. MILLS,

Special Assistant to the Attorney General of the United States, of Counsel.

GUY V. SHOUP, CHAS. R. LEWERS, Attorneys for all Defendants others than the Equitable Trust Company of New York.

J. W. McKINLEY,

Attorney for Defendant Equitable Trust Company of New York.

It is so ordered:

R. S. BEAN,

Judge.

Filed and entered March 21st, 1913.

WM. M. VAN DYKE,

Clerk.

By Chas. N. Williams,

Deputy Clerk. [68A]

At a stated term, to-wit: the January Term, A. D., 1913, of the District Court of the United States of America, in and for the Southern District of California, Southern Division, held at the court room thereof, in the city of Los Angeles, on Wednesday, the seventh day of May, in the year of our Lord one thousand nine hundred and thirteen.

Present:

The Honorable Robert S. Bean, District Judge. THE UNITED STATES OF AMERICA.

Complainants,

VS.

THE SOUTHERN PACIFIC COMPANY, et al.,
Defendants.

C. C. No. 221, Nor. Div.

This cause coming on this day to be heard on the motion of defendants for the enlargement of the time of defendants for taking testimony; Willis Mills, Esq., Special Assistant to the U.S. Attorney General, and J. C. Crawford, Esq., Special Assistant to the U.S. Attorney General, appearing as counsel for the United States; Chas. R. Lewers, Esq., of counsel for defendants, having read his motion for the enlargement of the time for taking testimony and also an affidavit in support thereof; and said application for an enlargement of time having been opposed by Willis Mills, Esq., Special Assistant to the Attorney General; now, after presentation of said motion and the opposition thereto, it is by the court ordered that defendants' time for the taking of testimony herein be, and the same hereby is extended sixty (60) days from June 1st, 1913; whereupon, on motion of counsel for the United States, it is ordered that the time of complainants for taking testimony in rebuttal be, and the same hereby is extended to November 1st. 1913. [69A]

IN THE DISTRICT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF CALIFORNIA.

UNITED STATES OF AMERICA,

Plaintiff.

VS.

SOUTHERN PACIFIC COMPANY, et al.,

Defendants.

IN EQUITY No. 221.

W. N. MILLS, Special Assistant to the Attorney General, Attorney for the Government.

CHARLES R. LEWERS, Attorney for defendant Company.

R. S. Bean, District Judge. (Sitting by special assignment).

This suit was brought by the United States to regain title to about ten sections of land in the Elk Hills near McKittrick, in the State of California, theretofore patented to the defendant Southern Pacific Railroad Company under the Act of Congress of July 27, 1866, granting land to aid in the construction of its road. Mineral lands (except iron and coal) were exempt from the operation of the grant.

The lands in controversy are within the indemnity limits of the grant and were applied for and patented to the company as non-mineral lands in lieu of lands lost within place limits. The first selection list was tendered November 14, 1903, but rejected because the lands applied for had been withdrawn from entry. The suspension order was revoked by the Department in the spring of 1904 and lists were retendered, the final one upon which patents issued on September 6, 1904. The patents were issued in December of that year. Each selection list was accompanied by an affidavit of Eberlein, the land agent of the company, stating that he had "caused the lands selected in said company list No. [70A] 89 to be carefully examined by the agents and employees of said company as to their mineral or agricultural character, and that to the best of his knowledge and belief none of the lands referred in said list are mineral lands." The land officers accepted the affidavits and statements therein as true and passed the lands to patent.

The complaint charges that the affidavits accompanying the selection lists were false and that the lands were known oil bearing lands at the time of the proceedings resulting in the patents, and were procured in pursuance of a fraudulent scheme to acquire mineral lands under an agricultural grant. Issue has been joined on the averments of the bill, evidence taken and the case submitted for decision on the merits. The evidence is so voluminous that I cannot, without prolonging this memorandum beyond any reasonable limit, refer to it in detail. From it, however, I extract the following facts as either admitted or clearly proven.

(1) The lands in controversy were at the time of the proceedings resulting in the patents within a known and well recognized oil district and had been previously returned by the U.S. Surveyor as oil bearing lands, and at the time the selection list was first filed were within a previous withdrawal order of the department because of their probable oil character.

(2) They are rough broken, arid lands, of no substantial value for agricultural purposes or any other purpose than their oil contents.

(3) The statement in the affidavits of Eberlein that he has caused the lands to be carefully examined by the agents and employes of the company as to their mineral or agricultural character was and is untrue. This is admitted. Eberlein testified that he had not caused an examination of the lands to be made, and personally knew nothing about their character or con [71A] tents at the time he made

the several affidavits, and the insistence of the defendant throughout the case has been that no examination of the lands to ascertain their mineral contents had been made by any agent or employe prior to the issuance of the patents, although they had for a year or more maintained a corps of expert oil geologists who were actively engaged in examining and classifying lands in the vicinity for the purpose of ascertaining their character.

(4) I think it clearly appears from the documentary evidence in the case, and particularly from the correspondence from Eberlein's files (a portion of which was kept separate from the general files of the office and guarded with the utmost secrecy until compelled to be produced on this hearing) that at the time the selections were made and the patents issued the officers of the company in charge of the matter were conscious that the lands were if not actual at least probable oil bearing, and that the selections were made and strenuously urged to patent for that reason, and not because of their agricultural value. Nearly two months before the first selection list was filed. Eberlein wrote to Mr. Kruttschnitt, the vice-president of the company, saying that he expected to tender selection lists covering lands in the township in question within a week or ten days, and asking that Chambers, the Washington attorney of the company, be requested to give special attention to the patenting of the lands covered thereby. On October 12th Chambers wrote to Kruttschnitt, saying that as soon as advised that the list

had been transmitted he would at the earliest possible date urge the issuance of special patents, but calling attention to the fact that the township in question was within a withdrawal order, but if advised just what lands Eberlein desired to select he would ask the Department to direct Special Agent Ryan to examine the lands as quickly as possible and make special report as to their [72A] character. On December 10, 1913, within thirty days after the list had been tendered by Eberlein and rejected, he wrote to Chambers in reference thereto, saying: "I am particularly anxious in regard to this list, as the lands adjoin the oil territory, and Mr. Kruttschnitt is very solicitous in regard to it. I have had in mind the suggestion you made some time ago in regard to inducing Mr. E. C. Ryan, Special Agent at Los Angeles, to make his report. I am not acquainted with Mr. Ryan, and it is a matter for serious consideration as to how to approach him. It would not do, certainly, to ask for a report recommending the release of the lands selected by us from suspension. In my opinion it would not be politic to ask for a release in any particular district. Mr. Ryan would, in all probability, jump at the conclusion that the railroad had some special information in regard to that district, and the result would probably be that our request would have the opposite effect from that desired. All that I could do would be in a general way to ask him to submit a report of the lands covered by the order of suspension which, as you know, embraces a very large area. How would it do to ask the Department to suggest to Mr. Ryan that he make a report of so much of the lands within the suspension limits as he has examined up to this time. It might be that such a report would cover the very district in which we are operating, and we would then be relieved from the danger of having called particular attention to any locality."

In the meantime, the defendant Kern Trading & Oil Company was organized for the purpose of taking over the oil lands of the defendant railroad company and operating same as a fuel department. To that end an instrument was prepared, without Eberlein's knowledge, leasing to the Oil Company lands belonging to the railway company in the vicinity of and adjoining the lands in dispute, which lease was forwarded to him for his [73A] signature on August 2, 1904. On September 3, 1904, Eberlein wrote W. B. Cornish, his superior officer, advising him of the proposed lease, pointing out several objections thereto and requesting advice as to the execution thereof, saying among other things: "I can stave off the delivery of this document for some time yet, I think, for the reason that if the knowledge of this lease becomes public property it will probably cause us a great deal of trouble in the United States Land Office, and may result in the loss of a large body of adjacent lands, which may hereafter turn out to be mineral and oil bearing. I found on taking charge of this office that a large body of our lands, especially indemnity lands in the Coalinga, McKittrick and Sunset fields, had been withdrawn by the United

States from entry, pending examination as to their mineral character. I have worked very hard and very steadily to get the United States to complete its report and dispose of this matter. I have just succeeded in getting the Special Agent in charge to make a report releasing our land from interdictment. If it becomes known that we have executed a lease of lands interspersed with those already under selection by us, and that the lease is for oil purposes, it seems to me that it will immediately encourage oil specul fors to file upon the lands so selected, and that the government will have good ground for refusing patent, inasmuch as we practically fix the mineral status of the land by this lease."

Thereafter, and notwithstanding Eberlein's knowledge and belief as disclosed by his correspondence, he filed on September 6, 1904, selection list upon which patents were issued, accompanied by his affidavit that he had caused the lands to be carefully examined by the agents and employes of the company as to their mineral or agricultural character, and that to the best of his knowledge and belief none of the lands referred to in the list were mineral lands. [74A]

He subsequently and before the issuance of the patents wrote to the general manager of the company a letter of similar import, a copy of which was furnished to Dumble, the geologist in charge of the fuel department, and on October 6, 1904, he had an interview with Dumble in reference to the matter, which resulted in a letter from Dumble to the manager of

the company, on December 7, 1904, saying: "In connection with our correspondence regarding the transfer of property to the Kern Trading & Oil Company, I have had a conversation with Mr. Eberlein and it seems for reasons of policy regarding certain unpatented lands that it will be best not to execute the lease of lands between the S. P. R. R. Co. and the K. T. & O. Co. at present. I would therefore suggest that the papers covering the transfer of property from the S. P. Co. to K. T. & O. Co. be executed and that the lease of lands in the McKittrick and Coalinga districts from the S. P. R. R. Co. to the K. T. & O. Co. be held up for the present."

(5) The only question upon which I have had any doubt or difficulty is whether the evidence, notwithstanding the matters referred to, is sufficient to show that the patents should be set aside because the lands were in fact known oil lands at the time of the proceedings resulting in their issuance. There had been no actual discovery of oil within the boundaries of the lands at that time but this was not necessary to determine their oil character. Oil like coal occurs in stratified forms of deposit or rather migrates into and permeates stratified deposits and follows them persistently and continuously unless interrupted by some intrusion to the end. Lands therefore may and often do become valuable for oil through adjacent disclosures and other surrounding conditions, although there has been no actual discovery within their boundaries.

From a careful examination of the evidence I have

reached the conclusion that the topographical and structural [75A] formation and character of the lands and of the surrounding area, their proximity to and the known extent of oil development and oil lands to the south and west, and extending out and towards the lands in question, the seepages on or near the lands and the anticlinal structure thereof, and the then known surrounding conditions "were clearly such as to engender the belief that the lands contained mineral (oil) deposits of such quality and in such quantity as would render their extraction profitable and justify expenditure to that end" at the time of the proceedings which resulted in the patents, and this is the test for a similar deposit laid down by the Supreme Court in the Diamond Coal Case, 233 U. S. 236.

At the time the selection list was first filed the lands in controversy together with a large area of other lands were within a previous withdrawal order of the department because of their probable oil contents. At the request of the defendant company the department ordered an examination of the lands applied for by a special agent to ascertain whether they should be relieved for suspension, and upon his report the suspension order was revoked as to these lands and they were subsequently patented to the defendant. The claim is made that the department in issuing the patents relied upon the report of its own employes as to the character of the land, and not the affidavit accompanying the selection lists. The evidence shows that the agent making the examina-

tion and report was not an oil or mineral expert and was instructed by his superior in the Land Office "that it would be unnecessary to go over all the lands but to drive over part of them just as the 'crow flies,' and to interview ranchmen, stockmen, etc., as to the location of oil wells producing oil in paying quantities" and "to recommend that those lands be relieved from suspension on which he found no oil well producing oil in paying quantities," and that he acted accordingly, and [76A] made no examination whereby he determined or could determine whether in fact the lands were mineral in character. In his report he said that he "found no oil seepages, oil springs or other indications of oil or mineral of any kind that would tend in his opinion to warrant" the lands being classified as mineral in character, and therefore recommended that they be relieved from suspension.

These proceedings were in no sense an adjudication but a method adopted by the department for determining whether its previous order of withdrawal should be revoked and the lands opened to entry. They did not establish the non-mineral character of the lands nor relieve the company from the consequences of submitting false and misleading affidavits and proof upon which the land officers were expected to and no doubt did rely in issuing patents.

Upon the whole record I conclude that the plaintiff is entitled to the relief demanded.

A decree to that effect may be prepared for the signature of myself or the presiding judge of the court.

Dated at Portland, Oregon, June 9, 1915.

R. S. BEAN,

Judge.

[Endorsed]: CC No. 221 U. S. District Court, Southern District of California, Northern Division. United States of America, vs. Southern Pacific Company, et al., Memorandum of conclusions. Filed June 11, 1915, Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. [77A]

IN THE DISTRICT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA,

Plaintiff.

VS.

SOUTHERN PACIFIC COMPANY, a corporation, SOUTHERN PACIFIC RAILROAD COMPANY, a corporation,

HOMER S. KING, Trustee,

JAMES K. WILSON, Trustee,

THE CENTRAL TRUST COMPANY OF NEW YORK, a corporation,

THE EQUITABLE TRUST COMPANY OF NEW YORK, a corporation, and the

KERN TRADING & OIL COMPANY, a corporation,

Defendants.

IN EQUITY No. 221.

Final Decree

This cause came on to be heard at this term and was argued by Counsel; and thereupon, upon consideration thereof, it is ORDERED, ADJUDGED AND DECREED as follows:

That Patent No. 135 heretofore issued by the United States of America to the defendant Southern Pacific Railroad Company on the 12th day of December, 1904, embracing the lands in this suit which are specifically described in Paragraph V of the bill of complaint herein, as follows, to-wit: All of the following tracts of land situated in Township Thirty (30) South [78A] Range Twenty-three (23) East, Mount Diablo Base and Meridian, in the State of California, to-wit: All of Section fifteen, containing six hundred and forty acres; Lots numbered one, two, three, four, five, six, seven, eight, nine, ten, eleven, and twelve of Section Seventeen, containing four hundred sixty-four acres and forty-nine hundredths of an acre; the lots numbered three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen and fourteen of Section nineteen, containing four hundred seventy-one acres and thirty-six hundredths of an acre; all of Section twenty-one, containing six hundred forty acres; all of Section twenty-three, containing six hundred and forty acres; the lots numbered one, two, three, four, five, six, seven, eight, nine, ten, eleven and twelve and the West half of Section twenty-five, containing six hundred ninety-three acres and thirty-two hundredths of an acre; all of Section twenty-seven, containing six hundred forty

acres; all of Section twenty-nine, containing six hundred forty acres; all of Section thirty-three, containing six hundred forty acres; all of Section thirty-five, containing six hundred forty acres, is hereby annulled, revoked, cancelled, set aside and held for naught.

2. That the deed of trust mentioned in the bill of complaint and in the several answers herein, which was executed and delivered by the defendants Southern Pacific Railroad Company and Southern Pacific Company to the defendant Central Trust Company of New York, dated September 15, 1893, and also that certain supplemental trust deed executed by the same defendants to the said Central Trust Company of New York, dated August 18, 1898, amending the said first mentioned trust deed of September 15, 1893, in so far as the said trust deeds relate to or affect the lands hereinabove described, be and the same are hereby set aside and held for naught. [79A]

3. That the deed of trust mentioned in the bill of complaint and in the said several answers thereto which was executed and delivered by the defendant Southern Pacific Railroad Company to the defendant Equitable Trust Company of New York, dated January 3, 1905, in so far as the same relates to or affects the lands hereinabove described, be and the same is hereby set aside and held for naught.

4. That the deed of trust dated April 1, 1875, which was executed and delivered by the defendant Southern Pacific Railroad Company to certain trustees, of which the defendants Homer S. King and

James K. Wilson are the surviving trustees, in so far as the same relates to or purports in any wise to affect the lands hereinabove described, be and the same is hereby set aside and held for naught.

That the full legal and equitable title and ownership, including the right of immediate possession in and to all of said lands described in this decree, be and they are hereby restored to and vested in the United States of America, and that the defendants Southern Pacific Company, Southern Pacific Railroad Company, Kern Trading & Oil Company, Homer S. King, James K. Wilson, Central Trust Company of New York and Equitable Trust Company of New York, and each of them, and all persons claiming under them or either of them, are hereby declared and decreed to be without any right, title or interest, or claim whatsoever in or to any of the said lands, and are hereby enjoined from claiming or attempting to exercise any right, title, interest, lien or claim in or to the said lands or any part thereof. [80A]

And it is further ORDERED, ADJUDGED AND DECREED that this decree shall be recorded in the county records of Kern County, California, as a muniment of the plaintiff's title, and that the defendant Southern Pacific Railroad Company pay unto the plaintiff its costs in this suit to be taxed, in default whereof execution shall issue therefor.

Dated this 5th day of Aug. 1915.

R. S. BEAN, District Judge. Decree filed and entered August 9th, 1915, pursuant to order made by Hon. Benjamin F. Bledsoe, Judge U. S. Dist. Court at Los Angeles, Calif. Wm. M. Van Dyke, Clerk. By T. F. Green, Deputy.

[Endorsed]: C. C. No. 221 U. S. District Court, Southern District of California, Northern Division. United States of America vs. So. Pac. Company et al. Decree Filed Aug. 9, 1915. Wm. M. Van Dyke, Clerk. T. F. Green, Deputy. [81A]

No. 221

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA,

Plaintiff,

VS.

THE SOUTHERN PACIFIC COMPANY, a corporation,

THE SOUTHERN PACIFIC RAILROAD COM-PANY, a corporation,

HOMER S. KING, Trustee,

JAMES K. WILSON, Trustee,

THE CENTRAL TRUST COMPANY OF NEW YORK, a corporation,

THE EQUITABLE TRUST COMPANY OF NEW YORK, a corporation,

THE KERN TRADING & OIL COMPANY, a corporation,

Defendants.

Order Enlarging Time for Appellee to File Praecipe for the Incorporation of Any Additional Portions of the Record in the Transcript on Appeal, and to Make Any Objections to, or Propose Any Amendments to, the Statement of the Evidence Filed by Appellants Herein.

Good cause being shown therefor, the time within which the above-named plaintiff and appellee, UNITED STATES OF AMERICA, shall be required to file with the Clerk of this court its praecipe indicating such additional portions of the record desired by it to be incorporated into the transcript of appeal herein, and the time in which said appellee shall be required to make any objections to, or propose any amendments to, the proposed statement of the evidence heretofore filed herein by the abovenamed defendants and appellants and marked "Exhibit A," is hereby enlarged and extended to and including the 20th day of April, 1916. [82A]

Dated February 12th, 1916.

R. S. BEAN, District Judge.

[Endorsed]: Original. C. C. No. 221. In the District Court of the United States for the Southern District of California. United States of America, Plaintiff, vs. Southern Pacific Company, et al., Defendants. Order enlarging time for appellee to file Praecipe for the incorporation of any additional portions of the record in the Transcript on Appeal * * * Filed Feb. 12, 1916. Wm. M. Van Dyke, Clerk, By Leslie S. Colyer, Deputy. Eq. O. B. 166, [83A]

No. 221

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

UNITED STATES OF AMERICA,

Plaintiff,

vs.

THE SOUTHERN PACIFIC COMPANY, a corporation,

THE SOUTHERN PACIFIC RAILROAD COM-PANY, a corporation,

HOMER S. KING, Trustee,

JAMES K. WILSON, Trustee,

THE CENTRAL TRUST COMPANY OF NEW YORK, a corporation,

THE EQUITABLE TRUST COMPANY OF NEW YORK, a corporation,

THE KERN TRADING & OIL COMPANY, a corporation,

Defendants.

Order Enlarging Time for Appellee to File Praecipe for the Incorporation of Any Additional Portions of the Record in the Transcript on Appeal, and to Make Any Objections to, or Propose Any Amendments to, the Statement of the Evidence Filed by Appellants Herein.

Good cause being shown therefor, the time within which the above-named plaintiff and appellee, UNITED STATES OF AMERICA, shall be required to file with the Clerk of this court its praecipe indicating such additional portions of the record de-

sired by it to be incorporated into the transcript of appeal herein, and the time in which said appellee shall be required to make any objections to, or propose any amendments to, the proposed statement of the evidence heretofore filed herein by the abovenamed defendants and appellants and marked "Exhibit A," is hereby enlarged and extended to and including the 20th day of April, 1916.

Dated February 19, 1916.

OSCAR A. TRIPPET,

District Judge. [84A]

[Endorsed]: C. C. No. 221. In the District Court of the United States for the Sou. Dist. of California, Southern Division. United States of America, vs. The Southern Pacific Company, et al., Order. Filed Feb. 19, 1916, Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. Eq. Order Book 168. [85A] At a stated term, to wit: The Special January Term,

A. D. 1916, of the District Court of the United States, for the Southern District of California, Northern Division, held at the court room thereof in the city of Los Angeles, on Friday, the seventeenth day of March, in the year of our Lord One Thousand Nine Hundred and Sixteen;

Present:

The Honorable Benjamin F. Bledsoe, District Judge.
THE UNITED STATES OF AMERICA,

Complainants,

VS.

SOUTHERN PACIFIC COMPANY, et al.,

Defendants.

C. C. No. 221, N. D.

Albert Schoonover, Esq., U. S. Attorney, and E. J. Justice, Esq., Special Assistant to the U.S. Attorney General; Chas. B. Lewers, Esq., and Joseph H. Call, Esq., appearing as counsel for defendants, the Southern Pacific Company, et al; and counsel for the United States having moved the court to allow the Government sixty (60) days additional time within which to prepare reply statements and amendments to the bill of exceptions or statement on appeal of defendants; and said motion for additional time having been argued, in support thereof by Albert Schoonover, Esq., U. S. Attorney, of counsel for the United States, and in opposition thereto by Chas. R. Lewers, Esq., of counsel for defendants Southern Pacific Company, et al., and in support thereof in reply by E. J. Justice, Esq., Special Assistant to the U. S. Attorney General, of counsel for the United States, and in opposition thereto in reply by Joseph H. Call, Esq., of counsel for defendants Southern Pacific Company, et al; it is now by the court ordered that complainants be, and they hereby are granted thirty (30) days additional time from and after April [86A] 20th, 1916, within which to prepare said reply statements or amendments to the statement of defendants on their appeal herein to the United States Circuit Court of Appeals for the Ninth Circuit; and it is further ordered, on motion of Joseph H. Call, Esq., of counsel for defendants Southern Pacific Company, et al., and with the consent of all parties, that thirty (30) days' additional time from May 20th, 1916, (and date of citation), be, and hereby is granted within which to file the transcript of the record on appeal in this cause in the United States Circuit Court of Appeals for the Ninth Circuit. [87A]

IN THE DISTRICT COURT OF THE UNITED STATES, IN AND FOR THE SOUTHERN DISTRICT OF CALIFORNIA,

NORTHERN DIVISION.

THE UNITED STATES OF AMERICA,

Plaintiff,

VS.

SOUTHERN PACIFIC COMPANY, et al.,

Defendants.

IN EQUITY No. 221.

Order

For good cause shown, the time heretofore fixed in which appellee is required to propose amendments to the statement of record on appeal, is hereby extended to and including June 1, 1916.

Dated this 15th day of May, 1916.

BLEDSOE,

Judge.

[Endorsed]: No. 221 Equity. In the District Court of the United States for the South. Dist. of California, Northern Division. United States of America, Plaintiff, vs. Southern Pacific Company, et al., Defendants. Order. Filed May 15, 1916, Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. Eq. Order Book 173. [88A]

At a stated term, to wit: The Special January Term,
A. D., 1916, of the District Court of the United
States, for the Southern District of California,
Northern Division, held at the Court Room thereof
in the City of Los Angeles, on Wednesday, the
thirty-first day of May, in the year of our Lord
One Thousand Nine Hundred and Sixteen;

Present:

The Honorable Benjamin F. Bledsoe, District Judge. THE UNITED STATES OF AMERICA,

Complainants,

VS.

SOUTHERN PACIFIC COMPANY, et al., Defendants.

C. C. No. 221 N. D.

On motion of E. J. Justice, Esq., Special Assistant to the U. S. Attorney General, of counsel for the United States, and with the consent in open court of Charles R. Lewers, Esq., of counsel for defendants, it is, at the hour of 2:20 o'clock, P. M., by the court ordered that the matter of the settlement of the statement of evidence in proposed bill of exceptions and objections and amendments proposed thereto be hereafter taken up by the court on five (5) days' notice, regularly made, served and filed herein. [89A] At a stated term, to wit: The July Term, A. D. 1916, of the District Court of the United States, for the Southern District of California, Northern Division, held at the court room thereof, in the City of Los Angeles, on Monday, the eighteenth day of Sep-

tember, in the year of our Lord One Thousand Nine Hundred and Sixteen;

Present:

The Honorable Edward E. Cushman, District Judge.
THE UNITED STATES OF AMERICA,

Complainants,

VS.

SOUTHERN PACIFIC COMPANY, et al., Defendants.

C. C. No. 221 N. D.

This cause coming on this day to be heard on defendants' motion for the correction, settlement and approval of the condensed statement on appeal herein; F. P. Hopgood, Esq., Special Assistant to the U. S. Attorney General, and Albert Schoonover, Esq., U. S. Attorney, appearing as counsel for the United States; Joseph H. Call, Esq., appearing as counsel for defendants; and said motion having been argued, on behalf of the defendants, by Joseph H. Call, Esq., of counsel for defendants, and on behalf of the Government by F. P. Hopgood, Esq., Special Assistant to the U.S. Attorney General, of counsel for the United States; the court directs that counsel for the respective parties meet and endeavor to agree upon a settlement of said condensed statement on appeal, and it is by the court ordered that, for the settlement of such matters connected with said condensed statement on appeal as counsel cannot agree upon, this cause be, and the same hereby is continued for hearing of same until Wednesday, the 4th day of October, 1916, at 10 o'clock, A. M., at Fresno, California, before Hon. Robert S. Bean, District Judge. [90A]

At a stated term, to wit: The Special October Term,
A. D. 1916, of the District Court of the United
States for the Southern District of California,
Northern Division, held at the court room thereof,
in the city of Fresno, California, on Wednesday,
the fourth day of October, in the year of our Lord
One Thousand Nine Hundred and Sixteen:

Present:

The Honorable Robert S. Bean, District Judge.
THE UNITED STATES OF AMERICA,
Complainants.

VS.

SOUTHERN PACIFIC COMPANY, et al., Defendants.

C. C. No. 221 N. D.

This cause coming on this day for the settlement of the Statement of the Case, on appeal, now, on motion of Frank Hall, Esq., Special Assistant to the U. S. Attorney General, of counsel for the United States, no counsel appearing on behalf of defendants, it is ordered that this cause be, and the same hereby is continued for hearing regarding said settlement.

[91A]

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

THE UNITED STATES OF AMERICA,

Plaintiff.

SOUTHERN PACIFIC COMPANY, et al., Defendants. It is ordered that the condensation of the testimony of any witness as proposed by the government, where no objection is made by the appellant, be incorporated into the statement of the testimony to be used on appeal, and that the condensation of the testimony of any witness proposed by the appellant, where no objection is made by the government, be incorporated in and become a part of such statement. And that as to the remainder, that part of the condensation of the testimony of a witness by the appellee to which no objection is made shall be incorporated in and become a part of the statement, and that as to the remainder of such condensation, the questions and answers shall be included unless counsel otherwise agree.

Appellant's counsel shall serve a statement upon appellee's counsel designating the parts to which they object and which they desire to have inserted by questions and answers, within thirty days, and upon such notice being given, counsel for appellee shall have thirty days in which to designate any additional parts to be inserted by questions and answers.

R. S. BEAN, Judge.

Dated San Francisco, October 18, 1916.

[Endorsed]: C. C. 221-N. D. United States vs. So. Pac. Co. et al., Order as to Condensed Statement on Appeal. Filed Oct. 19, 1916, Wm. M. Van Dyke, Clerk, T. F. Green, Deputy. [92A]

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

THE UNITED STATES OF AMERICA,

Plaintiff,

VS.

SOUTHERN PACIFIC COMPANY, et al., Defendants.

No. 221

IN EQUITY.

Stipulation of Counsel with Reference to Statement of the Evidence on Appeal

After conference between counsel representing the plaintiff, appellee, and the defendants, appellants, in the above entitled cause, concerning the statement of the evidence to be incorporated in and made a part of the transcript of the record on appeal therein, it is by them STIPULATED AND AGREED as follows:

1.

That the parts of the original record proposed in paragraphs numbered I, II, III, IV, V VI-A, VI-B, VII, XII, XIII, XVI, XVII, XVIII, XX, XXII, and XXIII of Appellants' Designations filed in the office of the Clerk on November 2, 1916, pursuant to an order in that regard made by District Judge Robert S. Bean on October 18, 1916, shall be incorporated in the statement of the evidence as a part of the transcript on appeal.

2.

That the parts of the original record proposed in

paragraphs numbered VIII, IX, X, XI, XIV, XV, XVIII, XIX, and XXI of appellee's Designations filed in the office of the Clerk on November 16, 1916, pursuant to an order in that regard made by [93A] District Judge Robert S. Bean on October 18, 1916, shall be incorporated in the statement of the evidence as part of the transcript on appeal.

3.

That none of the evidence of William J. Meyers shall be incorporated in the statement of the evidence on appeal, but that all of his evidence, including reports and documents read into the record while he was on the stand from page 2398 of the original record to page 2457 thereof and from page 2544 thereof, shall be transcribed, treated as an exhibit, bound with the volume or volumes of exhibits and sent up as an original document without being printed.

4.

That the abstract of Location Notices contained in the original record from page 2650 to 2837 both inclusive thereof and all condensations thereof shall be excluded from the statement of the evidence on appeal, but shall be transcribed from the original record in full, treated as an exhibit, bound with the volume or volumes of exhibits and sent up as an original document without being printed.

5.

That all condensations of the evidence of W. E. White shall be stricken out and his testimony stated as a part of the evidence on appeal by questions and answers from the original record from page 7098 to

page 7138 both inclusive thereof; but that the drilling reports and other documents read into the record while this witness was on the stand shall be excluded from the statement of his evidence, transcribed in full from the original record, treated as an exhibit, bound with the volume or volumes of exhibits and sent up as an original document without being printed. [94A]

6.

That all condensations of the verbal testimony of George W. Stewart be stricken out and that the verbal testimony of said Stewart shall be stated in the evidence on appeal by questions and answers from the original record; but that all exhibits and documents introduced in evidence or read into the record while said witness was on the stand shall be excluded from the statement of the evidence on appeal and shall be transcribed in full from the original record, treated as an exhibit, bound with the volume or volumes of exhibits and sent up as an original document without being printed.

7.

That all condensations of the evidence of W. J. Luke, Jr., shall be stricken out and that said witness' testimony shall be stated by questions and answers from the original recordsfrom page 4766 to page 4876 both inclusive thereof.

8

That in lieu of the statement on page 793 of appellants' original condensation entitled OMISSION OF TESTIMONY there shall be inserted at the end of

the statement of the evidence to be included in the transcript on appeal the following:

"TESTIMONY OMITTED. During the Trial appellants raised the issue of whether petroleum is a mineral, contending that neither within the meaning of the Act of Congress of July 27, 1866 and the Joint Resolution of June 28, 1870 nor within the meaning of any Act of Congress or any recognized or established meaning is it such; and much testimony upon said issue was introduced both by appellants and appellee which is not made a part of this statement of the evidence on appeal for the reason that in the interval between the introduction of such testimony and the submission of the case the Supreme Court of the United States handed down its decision in the case of Edmund Burke vs. [95A] Southern Pacific Railroad Co., 234 U. S. 669 holding that petroleum is a mineral, and thus making such testimony immaterial."

9.

That all documents and exhibits introduced in evidence by the several parties shall be suitably bound by the Clerk and transmitted to the United States Circuit Court of Appeals for the Ninth Circuit as original documents without being printed; but that such documents, reports and other exhibits as have been incorporated in the statement of the evidence of the several witnesses heretofore prepared or condensed by either party and by the order of District Judge Bean or the consent of counsel agreed upon as the evidence of such witnesses to be included in the

transcript of the record on appeal, shall be retained therein, form part of such evidence and be printed therewith.

10.

That in preparing the final draft of the statement of the evidence to be included in the transcript of the record on appeal appellants shall, as far as possible, set out the evidence of the several witnesses in the order in which they were sworn and in which their testimony is reported in the original record.

San Francisco, Cal., November 29, 1916.

JOSEPH H. CALL, Of counsel for appellants. F. P. HOBGOOD, JR., Of counsel for appellee.

[Endorsed]: No. 221. In the District Court of the United States for the So. Dist. of California, Northern Divis. United States vs. Southern Pacific Co., et al., Stipulation of Counsel with reference to Statement of evidence on Appeal. Filed Dec. 1, 1916. Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. [96A]

IN THE DISTRICT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF CALIFORNIA.

NORTHERN DIVISION.

UNITED STATES OF AMERICA,

Plaintiff.

SOUTHERN PACIFIC COMPANY, et al.,
Defendants.

No. 221 IN EQUITY. Stipulation of Counsel as to Setting Appeal for Argument.

IT IS STIPULATED AND AGREED by and between counsel representing the several parties to the above entitled cause that the argument of the appeal therein to the United States Circuit Court of Appeals for the Ninth Circuit shall be set for argument in said Circuit Court of Appeals for the May Session 1917 thereof and for a day certain between the seventh day of May and the fifteenth day of May 1917; and that this stipulation shall be filed with the transcript of the record on appeal.

San Francisco, Cal.,

November 29, 1916.

JOSEPH H. CALL, Of counsel for appellants. F. P. HOBGOOD, JR., Of counsel for appellee.

[Endorsed]: No. 221. In the District Court of the United States for the So. Dist. of California, Northern Divis. United States vs. Southern Pacific Co., et al., Stipulation of counsel as to Setting appeal for argument. Filed Dec. 7, 1916, Wm. M. Van Dyke, Clerk, by Chas. N. Williams, Deputy Clerk. [97A] IN THE DISTRICT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT

OF CALIFORNIA,
NORTHERN DIVISION.

THE UNITED STATES OF AMERICA,

Plaintiff,

VS

SOUTHERN PACIFIC COMPANY, et al., Defendants.

IN EQUITY No. 221

Stipulation of Parties with Reference to Condensed Statement of Evidence.

It is stipulated and agreed by and between the undersigned counsel representing the plaintiff and the defendants in the above entitled cause that the condensed statement of evidence to be printed upon appeal heretofore transcribed and compiled under the direction of Francis P. Harrington and consisting of three volumes, the first volume comprising pages 1 to 1011 inclusive, the second volume comprising pages 1012 to 2340 inclusive and the third volume comprising pages 2341 to 3200 inclusive, is in conformity with orders heretofore made by Honorable Robert S. Bean, the judge who rendered the decree from which this appeal is prosecuted, and the several stipulations of counsel representing the parties to said cause with reference to the condensed statement of the evidence on appeal under the provisions of the pertinent rules of practice in equity.

It is further stipulated and agreed that one volume of exhibits and evidence containing 786 pages, transcribed by said Harrington and to be bound and transmitted as original documents, but not to be printed, is in conformity with the stipulations of counsel in that regard heretofore made. [98A]

It is further stipulated and agreed that, if there shall hereafter, whether before or after printing, be discovered in the statement of the evidence on appeal or the exhibits any error or errors made in transcribing such evidence or exhibits from the original record, where agreed upon, or from the condensation

heretofore made by the parties, where agreed upon, such error or errors shall be corrected; and that, if any material omission of evidence be discovered, such omission shall be supplied; and that in any and all such cases the undersigned will unite in signing and transmitting to the clerk of the circuit court of appeals such instructions as may be necessary to accomplish the purpose and intent of this stipulation.

San Francisco, Cal., January 26, 1917.

F. P. HOBGOOD, JR., Of counsel for plaintiff JOSEPH H. CALL, Of counsel for defendants.

(Endorsed): No. 221. In the District Court of the United States, for the Southern Dist. of Calif., Northern Div'n. United States of America, Plff., vs. Southern Pacific Co., et al., Defts. Stipulation of parties with reference to condensed statement of evidence. Filed Jan. 27, 1917. Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. [99A]

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT, SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION.

THE UNITED STATES OF AMERICA,

Plaintiff,

VS.

SOUTHERN PACIFIC COMPANY, et al., Defendants. Order Approving Statement of Evidence on Appeal.

This cause coming on to be heard this 27th day of January, 1917, on motion of counsel for appellants, defendants in said District Court, to approve as true, complete and properly prepared the condensed statement of evidence upon appeal; counsel for both sides being present;

Now, therefore, upon consideration thereof, it is ordered by the court that said condensed statement of testimony to be printed as a part of the record upon appeal, in pursuance of the designations and stipulations of the respective parties, and orders of the court, be and the same is hereby approved, the same having been transcribed by F. P. Harrington, and consisting of three volumes and containing 3200 pages in all, to be so printed as a part of the record upon appeal.

And it is further ordered, that one volume of exhibits and evidence containing 786 pages, transcribed by said F. P. Harrington, stipulated by the respective parties to this cause to be transcribed, bound and transmitted to the court upon appeal as original documents, but not to be printed, is hereby approved and shall be so bound and transmitted by the clerk as a part of the record upon appeal without being printed;

And it is further ordered, that the remaining exhibits and maps filed in evidence as a part of the record in this cause, shall in pursuance of stipulations of the parties, be suitably [100A] bound by the clerk of this court and transmitted as a part of the

record upon appeal herein as original documents, without being printed;

And it is further ordered, that said condensed statement of evidence, together with said exhibits, evidence and documents, so stipulated by the respective parties to be bound and transmitted without being printed, be and the same are hereby approved as the true, complete and properly prepared statement of evidence upon appeal.

OSCAR A. TRIPPET

Judge United States District Court, Southern District of California.

(Endorsed) No. 221. In the District Court of the United States for the Ninth Circuit, Southern District of California, Northern Division. United States of America, Plaintiff, vs. Southern Pacific Company, et al., Defendants. Order Approving Statement of evidence on appeal. Filed Jan. 27, 1917. Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. Eq. Order Book. [101A]

(Endorsed) Original. Equity No. In the United States Circuit Court of Appeals for the Ninth Circuit. The Southern Pacific Company, a corporation, et al., Appellants, vs. The United States of America, Appellee, Exhibit A. To be Printed. Volume I. Filed Jan. 27, 1917. Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. F. P. Harrington, Transcriber. [101½A]

EQUITY No. 221

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT SOUTHERN DISTRICT OF CALIFORNIA, NORTHERN DIVISION

THE UNITED STATES OF AMERICA,

Plaintiff,

VS.

THE SOUTHERN PACIFIC COMPANY, a corporation, et al.,

Defendants.

EXHIBIT A

Condensed Statement of Evidence in Transript on Appeal as Approved by the Court and to be Printed.

VOLUME I. [1]

JAMES MALCOLM GLEAVES, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am chief clerk in the office of the United States Surveyor-General for California. I am acquainted with the regulations and practice of that office with reference to the custody of plats of survey and field notes and their transmission to the General Land Office. The regulations require that a United States Deputy Surveyor, upon the completion of a contract, shall file the field notes of his returns with the Surveyor-General. They are taken up for examination and platting in the regulation order of receipt, and upon their approval by the Surveyor-General, a transcript of the official field notes of survey, as well

as a duplicate copy of the original plat, is forwarded to the Commissioner of the General Land Office for his acceptance. On April 18, 1906, the records in the office of the Surveyor-General, and the plats of survey and field notes for all of the townships of Kern County, California, were destroyed. Since that time the General Land Office has furnished our office with copies of the duplicates and copies furnished the General Land Office by our office. In preparing the plats of survey, a duplicate is made for the General Land Office and a so-called triplicate made for the local land office. Copies of the field notes are also made for the General Land Office. I know officially that plats of surveys of the following townships were so furnished to the General Land Office before the destruction of the records of the Surveyor-General's office by the fire of 1906, to wit: Townships 30, 31 and 32 South, Ranges 21, 22, 23 and 24 East, Mount Diablo Meridian, and Township 11 North, Ranges 23 and 24 West, San Bernardino Meridian. [2]

CROSS-EXAMINATION OF JAMES MAL-COLM GLEAVES.

I was employed in the Surveyor-General's office in San Francisco prior to December 12, 1904. I was appointed chief clerk of that office on the 31st day of March, 1898, and I have been employed in that capacity ever since. I am presuming that the maps and field notes were filed with the General Land Office because of the fact that after the destruction of the office, copies thereof were furnished our office.

Thereupon the plaintiff offered in evidence a certi-

fied and exemplified copy by the General Land Office of the plat of survey of Township 11 North, Range 23 West, San Bernardino Meridian, approved in the Surveyor-General's office on November 19, 1858, which said plat of survey was marked plaintiff's exhibit "A," and, together with all other exhibits offered by the plaintiff, is made a part of the record and transmitted to the Circuit Court of Appeals pursuant to the order of Judge Ross dated January 29, 1916, which reads in part as follows:

"That in preparing the transcript of the record upon appeal, that all maps and exhibits introduced in evidence by either or all parties may be bound in volumes and transmitted by the clerk as original documents as a part of the record upon appeal without being transcribed."

Thereupon the plaintiff offered in evidence a certified and exemplified copy of plat of survey of Township 11 North, Range 24 West, San Bernardino Meridian, approved in the Surveyor-General's office for California April 29, 1874, which said plat was marked plaintiff's exhibit "B."

Thereupon the plaintiff offered in evidence a certified and exemplified copy of plat of survey of Township 30 South, Range 22 East, Mount Diablo Meridian, approved in the Surveyor-General's office for California August 17, 1871, which said plat was marked plaintiff's exhibit "C." [3]

Thereupon the plaintiff offered in evidence a certified and exemplified copy of plat of survey of Township 30 South, Range 22 East, Mount Diablo Meridian, approved in the Surveyor-General's office for California November 18, 1893, which said plat was marked plaintiff's exhibit "D".

Thereupon the plaintiff offered in evidence a certified and exemplified copy of plat of survey of Township 30 South, Range 23 East, Mount Diablo Meridian, approved in the Surveyor General's office for California August 1, 1902, which said plat was marked plaintiff's exhibit "E".

Thereupon the plaintiff offered in evidence a certified copy of an original map made by the United States Geological Survey, under authority of law of the United States, published and on file in the archives of the survey, known as Preliminary Geologic and Structural Map of the McKittrick and Sunset Oil Regions, California, Plate 1, Bulletin 406, which said map was thereupon marked plaintiff's exhibit "F".

Thereupon the plaintiff offered in evidence certified and exemplified copies under the seal of the General Land Office of the following papers, to-wit: List No. 89, "Lands Selected by the Southern Pacific Railroad Company, Indemnity Limits Main Line", dated September 12, 1904; attached to which as a part thereof are the following two affidavits, which were read in evidence as follows, to-wit: "State of California, City and County of San Francisco, ss. I, Charles W. Eberlein, being duly sworn, depose and say: That I am the Acting Land Agent of the Southern Pacific Railroad Company, successor by consolidation to the Southern Pacific Railroad Com-

pany (of California); that the foregoing list of lands which I hereby select is a correct list of a portion of the public lands claimed by the said Southern Pacific Railroad Company, successor as aforesaid, as inuring to it to aid in the construction of the railroad of said company from Lerdo to Sumner, for which a grant of [4] lands was made by the Acts of Congress approved July 27, 1866, July 25, 1868, and June 28, 1870, as aforesaid; that the said lands are vacant, unappropriated, and are not interdicted mineral or reserved lands, and are of the character contemplated by the grant, being within the limits of the exterior ten (10) miles Indemnity Belt, on each side of the line of route for a continuous distance of twenty (20) miles, being for the sixth (6th) section of said road, starting from a point in N. E. 1/4 of Sec. 9, T. 28 S. R. 26 E. M. D. B. & M. and ending at a point in N. E. 1/4 of Sec. 5, T. 30 S. R. 29 E. M. D. B. & M., and that the specific losses for which indemnity is claimed are truly set forth and described in said list, and that said losses have not heretofore been indemnified in any manner. (Signed) Charles W. Eberlein, (Seal). Sworn to and subscribed before me, this thirty-first (31st) day of August, 1904. Witness my hand and Notarial Seal. (Signed) E. B. Ryan, Notary Public in and for the City and County of San Francisco, in the State of California." "State of California, City and County of San Francisco, ss. Charles W. Eberlein, being duly sworn, deposes and says: that he is the Acting Land Agent of the Southern Pacific Railroad Company, that he has

caused the lands selected in said company's list No. 89 to be carefully examined by the agents and employees of said company as to their mineral or agricultural character, and that to the best of his knowledge and belief none of the lands returned in said list are mineral lands. (Signed) Charles W. Eberlein. Subscribed and sworn to before me this 31st day of August, 1904, E. B. Ryan, Notary Public in and for the City and County of San Francisco, State of California", which said selection list No. 89 was marked plaintiff's exhibit "G", and is transmitted as a whole in the same manner as plaintiff's exhibit "A".

W. H. HILL, a witness called and sworn on behalf of the plaintiff, testified as follows: [5]

DIRECT EXAMINATION

I reside in Bakersfield, Kern County, California, and am in the oil business, and am a maker of oil maps. I am a member of the firm of Barlow & Hill. That firm, in 1904, published a map of the California oil fields of Kern River, Coalinga, Sunset, Midway and McKittrick districts. The sheet marked Range 21 East, 22 East, and 30 South, "McKittrick Oil Fields", was constructed by us in the following manner: We have copies of all these separate townships, obtained from the land office in Visalia, giving the outline and the acreage and the survey direction. From these, I compile these maps myself, as far as the outline and the acreage is concerned. The other data on the map was nearly all obtained by my personal visit. The other data consists principally in

110

the location of oil wells or oil drilling rigs or abandoned wells. This is the data that I speak of as obtained by personal visit of myself through the fields. A drilling rig is indicated on this map by a circle with a dot in the center. A derrick is indicated only by a circle. When oil is struck, the whole interior of the circle is blackened. If the well was abandoned, four short marks are made on the opposite sides of the circle. The date on the map is 1904 and it is a correct picture of the oil conditions in the particular townships it purports to picture at that time. The same facts as to the manner of construction apply to the map marked Ranges 23 and 24 East, and Townships 31 and 32 South, called the "Midway Oil Fields", and to the map marked Range 24 West, Range 23 West, and Townships 11 and 12 North, called "Sunset Oil Fields". I personally visited every place on there, or nearly every one, and obtained from the owners the exact location, as nearly as could be. It was admitted that none of the maps attempt to picture townships known as 20-23. The book, including these maps, is marked plaintiff's exhibit "HD". We published twenty-five hundred copies of this [6] edition, including the maps, and sold all of them, generally in single copies. Probably two-thirds were sold in and around the oil fields in Kern County. The balance were sold in Los Angeles and San Francisco, except a few sent East by mail and to the old country. This map was completed and published before August 31, 1904. All the printed matter in this book was prepared by me personally.

except the advertisements were attended to by my partner. The names of the companies I got from the superintendents and I obtained some of the locations of the particular part of the property on which a well was located from them. Some of the information I got from the abstract office. I did not go in every case upon the section. I only went where there was development. In many cases I got my information from individuals, from the abstract office, or from whatever source I thought was reliable. As far as these three maps are concerned, they are based on my personal visits to each and every claim, but in the Coalinga case I took most of the information from other parties and did not go on personal investigation as I did in these three maps, [7]

A. C. VEATCH, called and sworn as a witness for the plaintiff, testified as follows:

DIRECT EXAMINATION

I was connected with the Geological Survey of the United States between the years 1902 and 1910, inclusive, and during that time had experience in the making of topographical maps. I did not make the map marked "I-LL" for identification, but I compiled portions of it. The map is a photograph of two topographic atlas sheets of the Geological Survey known as the Bakersfield Quadrangle and the McKittrick Quadrangle. These sheets were pasted together and the portion covering this map enlarged to the present scale. The dark line running through the center shows the point at which the two quadrangles were joined. The map differs from the original

sheets in the addition on the face of it of the section numbers and other additions placed there by me on information that I had from personal investigation in the fields and from the maps of Barlow & Hill, of 1904, known as exhibits "HA", "HB" and "HC". I obtained the quadrangles at the Geological Survey. They were made from sheets in the field, field work. I have used the open red circles for wells uncompleted; that is, those drilling, standing, or abandoned in 1904, and a solid red circle for those which had produced or were producing in 1904. The Elk Hills. so-called, and the Buena Vista Hills, so-called, are pictured on this map. I have outlined the features as shown by the contour lines with a heavy brown line to enable one to pick them up quickly. Exhibits "HA", "HB" and "HC" are substantially a correct picture as shown by the Barlow & Hill Maps of the conditions in that oil field so far as the oil development was concerned in 1904. The sections marked with red lines in Township 30 South, 23 East, are the lands involved in this suit, according to the description furnished me. The black lines here in 30-23 are the anticlinal axis where the arrow points away from the line. The same is true as to the other black lines on the map. Where [8] the arrows point towards the line. it is the synclinal axis. The legend on the margin correctly designates the symbols.

Thereupon, the plaintiff offered in evidence the map identified by the witness and marked Plaintiff's Exhibit "I".

CROSS-EXAMINATION

This map was not prepared by me. The base is a photograph from quadrangles of the Geological Survev. I have been over the map and find it substantially correct, and have indicated anticlinal axes where I have found them. I would say that all the map is a matter of compilation which I have checked up in the field. I have not checked all the wells indicated, as it cannot be done at the present time. The portion of the map which is not the result of my own personal investigations is the detail topography. I did not sketch each line of it. I verified the general aspect of it as a correct picture. I checked the map in Township 30-23 and in the Temblor Range in those adjoining hills to verify its general correctness for the purpose of introducing it as a picture of the regions. The synclinal axis between the Elk Hills and the McKittrick-Buena Vista Hills is a matter of personal observation. The position of the axis of the anticline in the McKittrick Hills,—that is, the eastern end,-is a matter of exact determination on the ground. The indication of the anticline and synclines upon the map, the ones that I have indicated, is the result of my own investigation, and the others are taken from other maps. A portion of these were taken subject to verification and correction from field investigation, from the map prepared by Ralph Arnold and Harry Johnson. I was chairman of the oil Land Classification Board of the Geological Survey and, as such, had to classify the land on the map. and I discussed the map (Plaintiff's exhibit "I") with Mr. Arnold. [9]

S. G. DROUILLARD, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I live in Invo County, California, and am in the bee business. I have prospected and mined most of my life, having been in the mining and prospecting business something like thirty or thirty-five years. I was engaged in the oil business from 1899 to about 1904. I have made mineral locations in Kern County. I have forgotten the townships and ranges that I located. I located some land in Midway; some in Tembler; some in McKittrick; and some also in what is called Elk Hills, which we called at that time Buena Vista Hills. We located these lands for oil. That was in 1899, I think. I am acquainted with the outcroppings of oil sands [10] or oil seepages in that country. I have seen oil outeroppings or seepages. I disremember the section it was on, but it is between two and one-half and three miles a little south of west of the old "Headquarters Ranch" where the bridge crosses the slough-right here (witness indicates place on map). We got all our water from that place. That would be on section 15 in 30-24. found the outeroppings of oil sand; gas and sulphur mixed with it. I disremember how extensive it was, but it was quite a belt of sand cropping. We did some work on it; a little, but not much. We stopped there an hour or an hour and a half after we located it. On the strength of these oil seeps was the reason

we located the land. Associated with me was Jim Wagy, S. M. Wagy, Charles Lemont, Thomas Baker, Jeff Packard, John Jean, and others. I have been in Kern County since 1854 and have been over in this oil field many times during that time. I worked for Miller & Lux there on the range. When I first remember that country, the first development work that was ever done there was done about three miles north and west of McKittrick at a location at that time called the Bond Spring or the lower San Maria Spring. There was a small derrick put up there at that time by a man named Bond. That was along in 1874 that I saw it. Of course, Bond had done some work there before that time. In that year, oil was running out of Bond's well. He had a well sunk there. This was three miles from McKittrick, being northwest of McKittrick on the same anticline. I know the country along the contact there from Mc-Kittrick as far south as Sunset, along the eastern flank of that range. I located Midway land for E. J. Boust. I have noticed oil seepages along that contact going down to Sunset. I noticed it in two places; one I think was on section 26, that I located. I forget the township and range. It was called afterwards the Mount Diablo Oil Company. Along the contact between the McKittrick formation and the Temblor Range, running between McKittrick and Sunset, there is quite a lot [11] of what we called at that time Brea. We called it asphaltum. In its essence it is asphaltum. That would be about six miles from Sunset. Northwest of Sunset is where I made these locations

for myself. I located sections 24 and 26 for myself. The balance of the land I surveyed for Mr. Boust. Those locations were made upon the strength of the discoveries that I have spoken of. I know of further seepages in that country of my own knowledge. I found quite a lot of seeps outside of that. I found seeps west of McKittrick, north and northwest. I found oil croppings northwest of McKittrick, right through to Canary Springs, which is north and west of Temblor. To our locations, we called it six miles northwest of McKittrick. I know of seeps in 32-23 near the corner of 23, 24, 25 and 26, in the Midway. That is where I located. We found great blocks of asphaltum there. We lifted some of them up and there was oil on the under-side of them, seeping out. You could turn up a block of it and find the drips of oil. Of course, on the surface it was evaporated. I disclosed my discovery on the Elk Hills to a man named Charlie Lamont. He is one of them mentioned as my associates. I was surveying that ground for Boust and Lament was working for me. When I went out with Lamont and located lands, our location covered the seep in Elk Hills. Our locations covered seven sections, if I remember right. I was there in 1874 where that seep was. The sand at that time was wet from oil. It'would adhere to the hand when you would squeeze it together. There was a prominent smell of gas. We found other seeps north and west that we compared with it, with our instrument, and it would hit the Elk Hills. We supposed it was an anticline. That anticline was running parallel

with McKittrick and that would be southeast and northwest. When I went over this oil seep in 30-24, at the time I took Mr. Lamont over there and went in with my associates, the sand was dry. I regarded the Elk Hills at that time as oil territory. The formation was exactly like the balance of [12] the country that had oil in it. It was generally regarded in that country by competent oil men as oil land. I rode over these hills hundreds of times. I worked there, running cattle over them. Those hills have no value for crops. Early in the spring of the year, I suppose for about two or three months, the land has some value for grazing purposes. The nature of the soil there is phosphate, gypsum and Fuller's Earth. There is no possibility of water for irrigation purposes on those hills, unless you could get it by artesian wells. There is no surface indication of water. The surface of the country in the hills is badly broken, cut up pretty badly by small, short canyons. I never saw any Southern Pacific people in there in 1899, in the Elk Hills. I know a man by the name of Treadwell and one by the name of McWhorter. I never saw either one of them in the Elk Hills in 1899, but I saw them in McKittrick. In those days we called the Elk Hills the Buena Vista Hills. The group of hills which is shown on the map as the Elk Hills and the group of hills known as the Buena Vista Hills were in those days altogether called the Buena Vista Hills, without distinction. The oil seepages along the Temblor Range on the east flank which I discovered on the way down to Sunset, between McKittrick and Sunset, I discovered in 1899; that is, as near as I can remember. The oil spring which we called the Bond Spring was known in that community there for floating oil. When I was working for Miller & Lux Company we would drive the horses up there and doctor them. We would wash their backs off with this sulphur water and then oil them and turn them out on the range and hold them there until their backs would heal up. We used the oil out of the springs, coming naturally from the ground. There were holes dug there. I first noticed those springs, to know that it was an oil spring, in 1874. Of course, we knew it was oil then, but we didn't know the value of it. [13]

CROSS-EXAMINATION OF S. G. DROUILLARD

I was in Bakersfield in 1899 and in 1899 I was loeating oil lands at Temblor, McKittrick, Midway and the Elk Hills. The location that I made in the Elk Hills-I do not recall the name of, but the people who were with me were Charlie Lamont, W. S. Wagy, J. E. Wagy, and Tom Baker, and others. I ran the instrument and surveyed the line. It was the outcrop of oil and that caused us to locate thereon. I remember making a location on November 8, 1899, together with Mrs. Stella Packard, F. A. Tracy, J. J. Packard, Mrs. Annie Baker, T. A. Baker, C. W. Lamont, This location was made in the Elk Hills. It was between two and one-half and three miles in a southwesterly direction from Miller & Lux's Headquarters Ranch, Headquarters Ranch being where the present ranch house is now located, two or three

miles east of Button Willow, south and east. I do not know what township the location was in. I have forgotten the ranges and townships. I knew it at the time I made the location. I plotted the land as I located it, but I lost my plots and have forgotten the townships and ranges. There were two surveys on the land before we surveyed it. We found an old survey and a new survey; that is, the stakes showed that they had been there for a number of years, but whether or not it was a Government survey, I don't know. It did not look like it had been surveyed for over three or four years. Mr. Thomas Baker prepared the location notices. I saw them. We understood that it was unsurveyed land at that time. I do not remember whether the location specified that the land was unsurveyed land. I know that it was our understanding it was unsurveyed, although these survevs had been made on it, but whether it was Miller & Lux's survey or the Government's survey, we didn't know. The point on Government exhibit "I", marked "Miller & Lux Ranch", on the canal [14] is the one I referred to as the Headquarters Ranch. The location I made on November 8, 1899, is indicated by a point near where the red mark is above the "I" in red lines, in Section 32, Township 30 South, Range 24 East: also in 29, 30 and 31. We located in a group there. On the same day, November 8, 1899, I, together with my brother and T. J. Packard, Mrs. Annie Baker, F. A. Baker, C. W. Lamont, M. S. Wagy and Mrs. Stella Packard, located a claim known as the Pelican Oil Company No. 18, adjoining

the other claim located on this same day. We located them all in one group; it was in the same township. On the same day, I, together with my brother, Mrs. Annie Baker, F. A. Baker, C. W. Lamont, M. S. Wagy, Mrs. Stella Packard and T. A. Tracy, located a claim known as the Pelican Oil Company No. 21, adjoining onto these other claims, in the same township; and on November 9, 1899, in the same neighborhood, in the same general vicinity, we located Pelican Oil Company No. 24; and on the same day, in the same township, we located Pelican Oil Claim No. 27; and on the same day, with the same people generally, in the same township, or in the same neighborhood, we located Pelican Oil Company No. 28; and on November 28, 1899, with the same people generally, we located Wagy Oil Claim No. 2, right in the same vicinity. This last claim may have been situated in Section 21, Township 30 South, Range 24 East; and on the same day, with the same persons, we located Wagy Oil Claim No. 3. I could not say whether it was in the same section or not; I think it was. I think it was Section 21. When we were making all of these locations in the month of November, 1899, we supposed we were in Township 30 South, Range 23 East. I would not say what range it was now because I have forgotten; but at that time I knew the range and township we were in. Looking at Government Exhibit "I", I think it was on Section 32, Township 30 South, Range 24 East, that we first found the oil seep. I locate the point on this map where we found this oil seep by the position of the Miller & Lux Head- [15]

quarters Ranch, as I am very familiar with the country without reference to section lines. I know the country pretty well, as I first commenced to work there in 1874, riding over the range for Miller & Lux. At that time I saw no prospecting there. I worked in the vicinity of that range about four years. My work carried me all over everywhere. We were riding after cattle scattered all over the country. I had occasion to go into the Elk Hills, where we would do most of our work in the spring of the year, gathering cattle in off the Elk Hills. They grazed there in the spring, early. There were also some elk in there grazing, and there are some few elk there yet. About 1878 I left there and went into the northern part of the state; into Modoc County. I returned into that vicinity in 1893. Between 1893 and 1899 I went into the Elk Hills several times hunting. I went in there possibly once a year during that time. During that time I saw no one in there prospecting for oil. What induced me to go back into the Elk Hills in 1899 was I heard that they had found this oil seep there. I first saw that oil seep in 1874 when I was working there at the Headquarters Ranch. That is not the same one I referred to which we used for rubbing horses' backs. In 1874 I got down and looked at it and felt of it and there appeared to be a little oil or something in it-"gumbo" we called it in those days. It had a distinct odor. There seemed to be lots of gas in it; it smelled gas and sulphur. It was petroleum gas. I know what petroleum gas is. At that time the seep was wet. It would adhere to the hand and we

would pick it up and ball it up and it would stick to your hand. We dug in it possibly four or five inches. There was no water there at that time. This was in the spring of 1874. I was at the seep once in a while afterwards while I was employed riding through the land and the seep remained in the same condition. The last time I saw it was in 1899, when I located it, at which time it was dry. We dug down about two feet into it. We found [16]—the gumbo—the sticky stuff-the same as I observed in 1874. It would adhere to the hand. I never had any tests made of it to determine whether or not it contained petroleum. I do not know if any test was ever made of it. In fact, after I located that land. I never went back on it any more. The only work we did on the lands was surveying them out. The other boys went back and done work on them afterwards. I don't know how much. I never had anything to do with the land after I located it. I located the ground in 1899 because I thought it would be oil land. I located it as a prospect. It looked as good as any other land that was in the country. The land I have testified to was generally regarded by competent oil men as oil territory in 1899. Every one that saw it said it was good oil land -people that were supposed to be oil men. The only man that was in the country at that time that was an oil man was Mr. Youle. I showed him some of the sand and he said it was oil sand. If we had anything to examine we took it to him, he being an oil man. My conclusion that the territory was generally regarded by competent oil men as oil territory is not based

upon the statement made to me by Mr. Youle from the sample of the sand that I gave him; we formed our ideas because it was the same formation as the whole entire country there was. It was gyosum. shale, sandstone and splotches of sulphur all over there, so we supposed it was good oil land. That is why we located it. There were several men there who pretended to be good oil men who pronouned it good oil territory. Wagy, my cousin, who is in the oil business a good deal, said it was good land. Lamont said it was good land, and Tom Baker and Packard claimed it was good land, and they were interested in it. I regarded it as good oil land, but it was withdrawn and we had to leave it and did nothing with it. I was in the oil business there from 1899 to 1904 or 1905, when I left. In 1899 the territory lying west of the place where we had our claims located in the Elk Hills [17] was generally regarded as oil territory by all the people that had located in there, amongst which number were Mr. John Jean and, I think, Mr. Treadwell and Mr. McWhorter. I remember hearing people, prior to 1904, state that the Elk Hills to west of the point where our claims were located was oil territory. There were quite a lot of claims taken in there, but I couldn't tell you who it was located them. Mr. Lamont and Mr. Wagy told me that it was all oil territory in plumb through there. That was before 1904 and after we made our locations in 1899. There were other parties who went out after I had located west of me. There was Mr. R. R. Wagy, J. R. Wagy and a company of them.

They located right adjoining onto us on the west. I think a man named Anderson was interested with them. To the best of my recollection, they abutted onto our land, the land I had located, to the west and south of us. I think they were in the same township. The continuation of the Elk Hills four, five or six miles to the west of our location was considered good oil territory by most everybody that talked about it. I have heard several speak of it as being good oil land, but I disremember who, as I can't remember so far back. I remember one man by the name of George Brown. He had a lot of locations in there in the Elk Hills, or the west end of them. He told me he had located some land or company in there and that he thought it was fine territory. This was over in the west end of the Elk Hills. I cannot tell you where he did locate; I never knew; but that he had located in that range some place. The Elk Hills were supposed to be in the oil belt and all of the ground that was in the oil belt was supposed to be oil land.

RE-DIRECT EXAMINATION OF S. G. DROUILLARD

I think we located seven sections in all, but how we located them I forget now. The anticline ran in a direction which would take it generally through the center of those hills. In [18] going from the seep in the eastern part to the other seep, you would go in a westerly direction. If we located four sections in township 30-24, the other sections of land were contiguous to the west of the locations and that would bring them into the next township. When I replied to Mr.

Lewers' question as to what townships we were in. I was not certain; I told him I had forgotten them. I remember the other three sections joined on the west of the four sections we first located, as we commenced here (indicating) at that seep and ran west from there. The order of withdrawal of the lands from disposition was a consideration for my leaving. Mr. Youle was considered an oil man. He had been working in the oil fields for a good many years. His headquarters at that time were at Sunset. He was superintendent for Jewett & Blodgett, or the Standard Asphalt Company. I regarded him as an oil expert. When I took those oil sands to him he was in Bakersfield. He told us it was a dry oil sand. He said it was a good indication. We thought the entire bunch of hills known as the Elk Hills good oil territory. All the people regarded the entire bunch of hills as good oil territory. 30 South, 23 East, is located in the middle of the Elk Hills and was regarded as good oil territory. That is the reason we located it. At the time I located those lands I knew the townships and ranges. There had been a survey made and it was sectionized and every corner marked, but we understood that it was unsurveyed land at that time and that is why I caused it to be surveyed. At the time I made the notices I knew of the land I was on as the land was marked, all surveyed out and sectionized, but whether it was a Government survey, we did not know, but we were of the opinion that it was unsurveyed land and we located it as such, but we got the townships and ranges all right.

RE-CROSS-EXAMINATION OF S. G. DROUILLARD.

That oil seep was in Section 32 and I fixed that point [19] by its distance and direction from the Miller & Lux Headquarters Ranch. That is the only way I can now do it. It is hardly possible that that was away over there in Section 32 in the other township. I think we got our location all right. When I testified that I located one claim on November 8 or 9, 1899, in Section 21, that claim was between three and four miles from Miller & Lux's Headquarters Ranch. It was in a southwesterly direction. Our locations were all in one group, they were not scattered out at all, and if our location notices read Township 30 South, Range 23 East, it was intended to represent the location on Section 21. We made seven or eight locations, but they were all abutting each other. I disremember whether those locations were all in Section 21 or whether four were in 23. I think two were in Section 25. I do not remember whether we went further west than Section 21. Prior to December 12. 1904, the territory delineated in red hatched lines on exhibit "I" was considered as good territory. I testified that the west end of those hills where we located there, were considered good oil land. Six miles west of where I located was considered all oil land, the whole territory there; that is, we considered it was. We were not experts, but we considered it good oil land; that was the general supposition. I can't say that I ever heard any expert or competent oil man say so, but I had an idea myself that it was good oil

land. I knew by the general formation. I found the anticlines was on Section 5. It was north of McKittrick. There is an oil sand cropping there; that is in 30-22. I located this on the McKittrick Oil Company's land and we located that section in there and found an oil anticline. We supposed it was there so I put my instrument on and sighted both ways to catch the belt over here and catch it over there (showing) and I did catch it and I located land over there on it and land here on it. I found the anticline still west of Section 5 over in the Templor. It was indicated there by oil [20] cropping, asphaltum, oil sand. I observed stratification that led me to believe there was an anticline. That stratification was dipping to the south and running in a northwesterly and southeasterly direction. We supposed it was a parallel antieline to the McKittrick.

JOHN JEAN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am a plumber and gas fitter by trade. I lived in Bakersfield in 1900; from October, 1899 to 1900. While I was living in Bakersfield, Charlie Lamont showed me some oil sands purporting to have been brought from the Elk Hills. He took me out where these oil sands were found. The point was between two and four miles from the Miller & Lux Ranch, in what was in those days called the Buena Vista Hills; I did not know their name at that time as the Elk Hills. They were a large group of hills running from Buena Vista Lake towards McKittrick, north of the

128

other group of hills at the foot of the lake. When I went over there with Lamont, I struck the oil sand: It was a black, coarse sand; dry oil. I think we struck about three feet of oil sand, three feet in depth. Approximately you could see a hundred feet in length and breadth at one point. It looked like dry oil, burnt sand. That was southwest from the Miller & Lux Headquarters Ranch on the canal. I don't know what township and range it was in. That was in 1899. I did not report that discovery in the Elk Hills exactly to the Southern Pacific Company, but to their representative, I suppose, who was Mr. L. G. Sarnow and J. B. Treadwell. To the best of my knowledge, Mr. Treadwell's position with the company was that of Chief Engineer, or oil geologist. I talked with him about his connection with the company. He said he was the head of the Oil Department of the Southern Pacific. [21] He was in charge at that time of oil developments at McKittrick. He had men in his employ digging wells and doing other things of that sort. Mr. L. G. Sarnow was an oil driller. I accompanied Mr. Sarnow and Mr. Treadwell out to these oil sands to show them to them. That was in 1899, I think. We went out there on horseback from the Miller & Lux Headquarters on the canal. Mr. Treadwell and Mr. Sarnow examined these oil sands at that place. Mr. Treadwell said it looked good. Mr. Sarnow said it looked good but that he thought it was deep territory and very expensive. On the strength of that discovery, I, with others, made locations of the lands about there. My associates were Mr. Sarnow and

Mr. Treadwell. Think we located on Section 31, near the oil seep. That would be, I think, in the section adjoining the section on which the oil sand was located. I think we located one section. We made no other locations. I have been over that country pretty well through the Elk Hills. The general formation of the surface is broken. It reminds me of an ash pit; you step on it and down in you go. As to vegetation, on the hills there is some sage brush, a little now and then. I do not remember noticing any feed for cattle there. Part of it might be susceptible of agricultural development and part of it was not. I guess grass would grow on all the hills. I don't know whether you could raise crops; I never saw it tried. The angle of the formation dipped to the northwest: I don't know how many degrees; I don't remember. I was in the employ part of the time of Mr. Sarnow and part of the time in the Water Company.

CROSS-EXAMINATION OF JOHN JEAN.

I think I was there in September. At that time of the year the hills are pretty brown, so far as grass is concerned. I don't remember ever being there in the spring of the year. I made those locations on Section 31 in 1899, I think. I did no work [22] on that claim. No work was done on the claim, to my knowledge. I never paid any assessment for work done on it. I never heard of any work being done on the location. I have never been there at any time since. Mr. Sarnow said that country gave indications of being very deep. I made inquiries and had knowledge at that time as to how deep wells could be sunk

with the appliances then in vogue. They could be sunk 1600 feet. There was no limit, I believe, as I understood it, to the depth of a well at that time. I never heard of any wells at that time being sunk to the depth of 5000 feet. I heard of a well being sunk to a depth exceeding 2500 feet. Mr. Youle told me about it. I never saw it. He told me where it was, but I forget now. He told me they went 3300 feet, I That was regarded as an unusually deep well at that time. Mr. Sarnow said he thought this would be very expensive territory. It was looked upon as a possibility and for that reason I located it. At that time there had been some other oil developments in the surrounding country and a number of miles away at Sunset. I do not think there was anything said about making this location as a bare chance of holding the territory to be disposed of. I expected to drill, but made no preparations or inquiries with reference to drilling. I gave up my expectations on account of lack of finances. Mr. Treadwell was associated with me in the location of the land. So far as I know he gave up when I did and Mr. Sarnow also. After making the locations I never went back to the land. I never sold any interest in my claim and never tried to. I just gave it up.

REDIRECT EXAMINATION OF JOHN JEAN

When I was in the employ of Mr. Treadwell and Mr. Sarnow over in Bakersfield, I was paid by check; I think on the Bank of Bakersfield. Mr. Sarnow would sign the checks. Mr. Treadwell [23] came out where I was working under Mr. Sarnow and he lived

there. That was in the course of his business. The Elk Hills at the time I found the seep over there and for the ensuing period of time up to 1904, I wouldn't say were good oil territory, but it was regarded as oil territory. I regarded it as such or I would not have made locations.

RE-CROSS EXAMINATION OF JOHN JEAN

I really, seriously regarded it as oil territory. The reason I did not hold on to my locations was because I did not have money enough. I never did any work on my locations. I had no money to do any work. I made attempts to borrow the money to do the work on it and I tried to interest someone in the location, but did not succeed, even though it was a promising oil location. It was not possible to get people interested in the oil business. They did not regard it as favorably as I did. I know something about the territory lying west of where I made my location as far as Asphalto. I don't know whether there was any asphaltum immediately to the west of my location, except up around Asphalto and up around Midway and Sunset. Going directly west from Section 31, a distance of six miles, there is no asphaltum that I know of. That would bring you up to McKittrick. I never made any locations in there. I don't remember anyone or anybody else making any locations immediately to the west of ours. I heard people discuss the territory lying just to the west of our location between the Elk Hills and Asphalto. Beginning just to the west of our location in Section 31, Township 30 South,

Range 24, and extending over a distance of six miles to the west, I heard W. E. Youle speak of that territory. He told me it ran from Buena Vista Lake to Sunset, Asphalto to the Buena Vista Hills. He told me that he was drilling in Sunset, and I asked him why he did not go into the flat, and he says: "We don't want light oil and if we go there we will get it. [24] We want asphaltum." I am referring to the flat northwest of Sunset. It runs clear over to the Elk Hills, "Buena Vista Hills," we called them. Mr. Youle never used the word "anticline." light oil runs there. I don't know about the township and range by 30 South, 23 East, but he told me it run from hill to hill. Specifically, he said it ran from Sunset to McKittrick and from Sunset up into the Elk Hills. He told me from the lake clear through to the hills, from hill to hill. He told me about the oil sand after I had seen it. He told me before I had ever seen or heard of the Elk Hills oil sand; this was in 1896. He told me of indications of oil other than those so-called oil sands, but not in the Elk Hills. He never told me about the Elk Hills, but just said it run from hill to hill, and he says: "We are after asphaltum and not oil." He did tell me if you go into the Elk Hills you will find oil anywhere north of the line between Sunset and McKittrick. I don't remember that he told me oil had been discovered or was known to exist anywhere north of that line.

RE-DIRECT EXAMINATION OF JOHN JEAN Mr. Youle said that from Buena Vista Lake through the hills to the other hills where McKittrick

is, and from Sunset north to McKittrick through that flat, there was oil. We drilled in Sunset; and while we were drilling there and every time we would go down the hill towards the flat, we would get light oil, and we abandoned those and came up the hill. Then, when we could not get much asphalt in Sunset, we moved over to Asphalto and done the same thing there. We would drop down the hills and then back up again. Mr. Youle told me this, to the best of my recollection, in 1896.

LUDOLPH G. SARNOW, a witness called and sworn on behalf of the plaintiff, testified as follows: [25]

DIRECT EXAMINATION

I live in Los Angeles and am the same L. G. Sarnow referred to by Mr. John Jean. I was at one time employed by the Southern Pacific Railroad. I had charge of the McKittrick; and then I moved up to Kern River and had charge of the field there. I had charge of the field, and was drilling by contract also, on the side. I was in charge of the field. I had about seven years' experience in the oil business before that time. I had drilled some wells in Summerland, California, and in this field and Half Moon Bay and the first wells in McKittrick, I believe that we drilled the second well in the Kern River field. It was a producer. I believe we got the first oil in Mc-Kittrick, although we didn't perforate the casing. We plugged the well. I am very well acquainted with J. B. Treadwell, mentioned by Mr. Jean. He had charge of the oil division of the Southern Pacific.

134

He was a competent oil man. He hired me at Summerland. I was drilling there. We shipped up two drilling rigs and a carload of casing at that time. He ordered a lot of lumber shipped up from Summerland to McKittrick. There were not any houses there then. We landed in McKittrick, I believe, on the 12th day of May, 1899. The Southern Pacific Company brought the freight free of charge and we went to work in the McKittrick field and we drilled two wells on the hill and then went to the north end and drilled a well there and then I went to the Kern River field to my brother. My brother went with me from Summerland to McKittrick. He is a practical oil driller and oil man. Mr. Jean was hired by me and sometimes he worked for me on the rigs and sometimes he worked in the field. He was acquainted with Mr. Treadwell and it was through Mr. Tread well, I believe, that I got acquainted with Mr. Jean. While I was working for Mr. Treadwell, operating in Kern County, I believe I drilled thirty wells in the Kern field and three in the McKittrick field. The formation of the Elk Hills is shale, gypsum, and sand. It is substantially the same formation [26] over in the eastern flank of the Temblor Range. I have been in the Elk Hills and have located some claims there. The reason I located claims there was because Mr. Jean showed me some sand and I wanted to know where it came from and he told me it came from near Miller & Lux's Headquarters Ranch. It was a coarse pebble oil sand and I was interested in it when he showed it to me. It looked good. Mr. Treadwell saw

it and we arranged to go the next morning. I believe Mr. Jean showed it to me in the afternoon and I met Mr. Treadwell and we arranged to go the next morning, and we took a gasoline motor to come back on: We went out to the point that he showed us in the hills where he got the sand. First we went to the Headquarters and stayed there that night and then in the morning we drove over in the hills. I cannot remember just what section, township and range it was in. I don't know. It was about in a southwest direction from the Miller & Lux Headquarters. I would think it was about a twelve mile ride that day over and back. That would make it about six miles over. I think it was the same oil sand that Mr. Jean referred to in his testimony. I don't know of any other. Apparently it was a blow-out. There was an anticline that came to the surface in a way. It was just the same as you would find in Temblor. They are just similar, I believe, in a mining way, to what they called a "chimney," or something that way; a sort of a blow-out. That was what we called it. I thought it was deep. By deep I would mean somewhere between sixteen hundred or fifteen hundred to two thousand feet, or probably somewhere in that neighborhood. That was my idea of it. I thought it was good for oil, but I don't want to be held up as an expert on oil. That is just an opinion as a man. Mr. J. B. Treadwell was with me. He is a minerologist. He thought it was good for oil, but he had the same idea that I did, that it was deep. On the strength of that showing, Mr. Treadwell and Mr. Jean and I lo-

cated the land. With reference to that oil sand, we did [27] not locate just on the sand. I remember the sand was on one side of it and we seemed to figure that it came from the McKittrick or Temblor and we took the land that we thought to be in the strike; just which way it dipped from there, I don't remember. We located quite a number of claims. I don't remember how many. We had a great many names; I believe sixteen located with us. We located more than one section, but I don't remember how many acres there was in the claim, but it seems to me that we made four or five different claims, but I am not sure as to the number. I don't know whether Mr. Treadwell reported to the Southern Pacific Company of the mineral discovery there. He was looking after their oil claims at that time. Whenever Mr. Treadwell found anything that looked like oil, he had small maps, a little stack of them, which had all the townships and ranges printed on them, and if he found any oil he would take one of those maps and paint in on the little map and then file that and put it on a stack, and he had a big map and he would mark it on this big map, that is, the oil indications. Where there was a gypsum deposit, he would mark it with one color, or oil blow-out or this sand in another color, and asphaltum in some other color. I don't know anything about Mr. Treadwell's agreement with the Southern Pacific Company, but my understanding of the thing-

Mr. Lewers: I object to any testimony as to the witness' understanding; not responsive.

- A. Well, I would not be able to-
- Q. By Mr. Mills: Go on with your answer.
- A. My understanding was that he was employed by the Southern Pacific, and that anything that he would locate or acquire in any way would belong to the Southern Pacific. Just how I got that I don't know; but Mr. Treadwell and me used to sleep together in the same room.
- Q. Well, I can easily understand how you might get it by percolation [28]
- A. And I don't know just how. But that was my idea of it or understanding of it.
- Q. Did the Southern Pacific Company establish any credits in the bank at Bakersfield or other banks for Mr. Treadwell to deal in oil lands on?
- A. Well, not that I know exactly for what. He would get a letter saying that "There has been \$15,000 deposited—"
- Mr. Lewers: To which we object, on the ground it is calling for secondary evidence, and not the best evidence. If there are any letters, we ask that they be produced.
- Q. By Mr. Mills: Those letters are not in your possession, are they?
 - A. O, no; but I have seen them.
 - Q. Go on and tell what you saw in the letters.

Mr. Lewers: We renew our objection. It don't remove the lack of foundation that they are not in the possession of a particular witness. It is not the best evidence.

A. He showed me a letter where the Southern

Pacific had deposited \$15,000 to his credit, five thousand in one bank, and I believe in the Wells-Fargo bank.

Q. By Mr. Mills: What city?

A. San Francisco. And another in some other bank, and five thousand in the First National down here.

Q. In Los Angeles?

A. In Los Angeles. Two, five thousand each, was in San Francisco, and one five thousand was here. And he would make up his expense account and check against that.

Q. Do you know whether his employers had confidence in his judgment as to oil lands?

A. Why, yes sir; I think they did. I met Mr. Kruttschnitt and Mr. Huntington down in the oil fields, and they undoubtedly, from the way they spoke, had great confidence in his [29] opinion.

Q. Who was Mr. Kruttschnitt?

A. I don't know just—He was the head of the Southern Pacific.

Q. Was he at that time vice president or president of the Southern Pacific Railroad Company?

A. It seems to me Mr. Huntington was president at that time, and I don't know just what office he held now, I don't remember.

Q. Were they officials connected with the Southern Pacific Railroad Company?

A. They were officials of the Southern Pacific Railroad Company and they would come down and inspect the field. Q. They would come in around McKittrick and in this field generally?

A. Oh, yes; Kern field and McKittrick. Mr. Kruttschnitt would go around with me a great deal. When he come he would always leave the bunch and ask me to go around and show him everything.

Q. Where have you taken him?

A. Oh, in that field only. Right on Section 3— He would never go off the section—in Kern field.

Q. He was down there looking into the-

A. Looking at the wells and the oil.

Q. What year was that that Huntington and Kruttschnitt were down there?

A. I would say that was in the early part of 1900. Just what months, I don't remember.

Q. You were in there in 1904, were you?

A. No.

Q. What year did you leave the McKittrick field?

A. I believe I left some time during September, 1899. [30]

Q. Now, prior to that time, at any period—immediately prior to that time—with the knowledge of the formation of the Elk Hills, its comparison and similarity to the general McKittrick formation along the eastern flank of the Temblor Range, the development of oil sands by actual drilling along the Temblor flank from Sunset to McKittrick, the oil seep that you have mentioned in the Elk Hills, and such other evidences as were plainly conspicuous, upon the ground, of oil character, will you state whether a competent geologist, in your opinion, would have recommended

the investment of money in the Elk Hills with the reasonable expectation of developing paying oil property?

MR. LEWERS: To which we object, on the ground that no foundation has been laid; second, that the question is based upon a hypothesis which is not supported by the evidence already introduced; and, third, on the ground that it is calling for the conclusion of the witness as to what somebody else would conclude from indications and not upon the opinion of this witness who has already testified that he is not an oil expert or competent geologist; and, fourth, upon the ground that it is calling for an illegal test as to the character of mineral land, in that it does not call for a determination of whether or not the land in controversy or in question is land containing mineral in sufficient quantity to warrant its extraction to an economic profit. And we object, in addition thereto, upon the further ground that it has not been shown in evidence, and is not a fact, that petroleum is a mineral, first, within the meaning of the Act of Congress granting the land to the railroad that is not involved in this suit, and, second, that it is not a mineral within the Act of Congress or within any recognized or established meaning.

- A. Yes sir.
- Q. By Mr. Mills: Did you notice-
- A. Let me ask you one question there. "Prior to that time." Prior to what time did you mean? [31]
 - Q. Prior to the time you left there.
 - A. Oh; yes sir.

Q. Any time before you left there?

A. Yes sir.

CROSS EXAMINATION OF LUDOLPH G. SARNOW.

I don't remember of any competent geologist who recommended the Elk Hills as a place that would be worth prospecting for oil. I base my answer that a competent geologist would so recommend because I thought so. That was only my opinion of what he might say. I never took Mr. Kruttschnitt into any portion of the Elk Hills. I never left Section 3 with him in the Kern field. That is about twenty-five or thirty miles, as the crow flies, from the Elk Hills. I never examined the territory lying immediately west of our location and I had no personal knowledge of it as I had never been in the hills in that neighborhood west of our location. I had never heard of it being considered as proven oil territory, but so far as I heard it was considered as promising oil territory. It looked good here. I am basing my conclusion upon the blow-out down near Section 31 and not upon anything else. There were three traces of blow-outs off a little further to the west, but not as prominent as these others. They might have been in Section 30 to the north. I would not say, although it was right next to where we located. That is as near as I can get to it. I never had any tests made of that material. I didn't need any. I didn't think so. That was oil. I don't think it was possible that I was mistaken as to that containing oil, although I wouldn't say it is not possible. I have never known of similar blow142

outs being tested by chloroform tests and showing nothing. It might be so, but I have never seen any. I did no [32] work on that location an I never re-located it. I abandoned it. Oil went down to nothing. It was not worth anything. It sold in the Kern field for seven cents a barrel and there was not money enough in it to drill for it. I had no oil in Section 31 where the blow-out was. I based my judgment of the depth of probable oil discovery from the looks of the field. I had an idea that the depth was from fifteen hundred to two thousand feet, but it might have been deeper. Possibly not so deep, but I don't know. That was just an opinion. It is possible that a blow-out of that character wouldn't show any oil down below it at all. I don't know anything about the Pennsylvania fields. I never was there. But it was a cinch where this blow-out comes from that there was oil there. Without any test, I don't hesitate to say that. Even if samples taken from this particular blow-out show that there was absolutely no oil in it, I would gamble ten to one it was oil even though anyone said it was not. If tests were made by competent and disinterested persons according to the best approved methods, showed absolutely no oil, I would still say that it was a cinch that there was, because I seen the sand. I happened to see this particular sand. Mr. Treadwell did not re-locate this land, as oil was not worth anything. He was employed by the Southern Pacific Company during all the time that I was with him and a long time after that. I don't know whether it was the Southern Pa-

cific Railroad Company or the Southern Pacific Company. I rode on passes. I would telephone to Mr. Burkhalter and give him the name of any man I wished to pass to any place and return, or for myself or anyone else, and the pass was issued, but I don't know whether they were furnished by the Southern Pacific Company or the Southern Pacific Railroad Company, and I received vouchers from them for thousands of dollars at a time but I don't know from which company. Mr. Kruttschnitt was at the head of the whole Southern Pacific Department, but just what office he held I don't [33] remember. I have no definite certain knowledge as to what position Mr. Huntington and Mr. Kruttschnitt held or just what company they represented. It was my understanding that whatever Mr. Treadwell located was located for the benefit of the Southern Pacific Company. I never saw any correspondence between Mr. Treadwell and any officer of the Southern Pacific Company to that effect, and that was a general understanding that I reached through my associations with Mr. Treadwell and in no other way, and it is not based upon any exact knowledge. It is merely suppositions that I formed. I don't know just how I got that but that was my opinion of it. That was the impression I had. Referring to the letter to Mr. Treadwell concerning the deposits of money in certain banks, I don't remember by whom that letter was signed. I saw the letter itself. It was on a yellow piece of paper. I made no report directly to any person other than Mr. Treadwell. I took orders from him and him 144

only. From 1899 to 1904, the general impression amongst oil men was that wells could be sunk from twelve to fourteen hundred feet in depth. There was a well in Pico canyon above Ventura which I believe was 2600 or 2700 feet deep. The general impression was that with the appliances then existing anything beyond 1200 to 1400 feet was looked upon as economically impracticable. A 4,000 foot well would have cost a fortune in casing alone at that time and would have been regarded as prohibitive. If a competent geologist had told me at any time up to 1904 that oil could be developed in the Elk Hills at a depth of 4,000 feet, and if I had had the capital behind me to sink a well for oil there, I would not have done so because it would have cost too much. Even if he had told me it could have been developed at a depth of 3,000 feet, I do not think I would have touched it. I might have gone to 2,000 but no further. If he had told me that there was indications on the surface that showed a possibility of oil below which might not be great in quantity and would exist at [34] a depth of over 3,000 feet, I would not have looked upon it as a good business proposition to drill. At that time we were not looking for gushers and did not think there were any. A well might "blow its head off" for a couple of hours and then be a pumping well, and a pumping well would not be profitable at 4,000 feet. Even today I do not think a pumping well that produced no more than fifty barrels a day at a depth of 3,500 or 4,000 feet would pay, and I would not consider a territory containing such wells as a promising oil territory.

REDIRECT EXAMINATION LUDOLPH G. SARNOW

I paid all the men, every man that was drawing pay in the field, with a voucher and order on myself as against Treadwell; and the Southern Pacific and the Bank of Bakersfield, or any other man anywhere in that country, cashed it. Passes were issued to me over the Southern Pacific lines. Mr. Burkhalter, that I spoke of, who issued the passes at my request, was Division Superintendent at Bakersfield of the Southern Pacific Railroad. [35]

F. D. LOWE, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I reside near Bakersfield. I am a rancher. I am familiar with the portion of the country that is known as the Elk Hills, in Kern County-a portion on the east end. I first visited that locality in the latter part of 1900 for the purpose of making some mineral locations,-I mean oil locations. At that time there was an oil boom or oil excitement on in that vicinity. Some friends induced me to go with them and join them in making some oil locations. I heard of the discovery of oil evidences in the Elk Hills at that time. That was prior to my going there. I never was to the place, but it was spoken of to me as a blow-out, I believe. It was southwest from Miller's old headquarters. I heard various people speak of this blow-out, but not to any great extent. We kept on the east portion of the Elk Hills in Township 31 South, Range 24 East. I went in there in the latter part of 1900.

Mr. J. A. Boehn, C. A. Cochran, Chad Lewis and Mr. D. B. Hoy went with me. We looked carefully over the land to see if we could find anything on the surface that indicated an outcropping of oil sand. Our purpose in endeavoring to find such evidence was to make locations. We did find evidence. The first place that I made note of it was about three hundred yards due north of the northeast corner of Section 11, 31-24. That was in 1900. We found what appeared to us to look like oil sand in a gulch. We found another place similar to that at the center of Section 2 and exactly half a mile east of that point on the section line. Section 2 is in the same township. We found a third indication half a mile east of [36] the section line of Section 2. There we found practically the same thing. These oil sands showed stains and looked as though they were very much dried. It had become very much dried. We afterwards made locations. This was on the morning of the first of January, 1901. We located ten (10) Sections. I don't believe that I can name them by number at the present time, but I can locate them on the map. We afterwards did development work in connection with these locations. We incorporated into a company and levied an assessment and erected an eighty-foot derrick and made a contract with a party to begin drilling. The derrick was erected on the northeast corner of Section 11, Township 31 South, Range 24 East. That was near where we made the first discovery that I told about. The reason we were induced to locate the derrick there was because it was right

at the corner of a section and it was on a natural roadway going through those hills. It was also an ideal place to locate a well, being right at the corner of four sections and if we struck oil there we could easily locate another rig and another derrick and use our same engine. We got down about five hundred and sixty feet and struck small showing of oil and at various times we got gas. We piped the gas, but made no use of it particularly any more than to use it for cooking, which we did, and we piped it to the stove and cooked with it. The character of the ground or earth formation through which we drilled the five hundred and sixty feet was a sort of what we call "gumbo." It was so difficult that we could not make more than two feet a day progress. It would not mix with the water. The formation was a deep blue. It was identically like I had seen in the Kern River field just before they struck oil. I have seen a great many wells in the Kern River field and the character and formation and [37] condition of the soil just before encountering the oil. These wells in the Kern River Fields were paying wells, good wells, and I found the same character of formation in the five hundred and sixty foot well that we drilled out there on Section 11 as in the Kern River Fields. Subsequently we plowed a furrow on the section lines of our locations. In that way we marked them out. We made a road coming from Miller's headquarters. That was the most direct to the ranch. That was while we were drilling. We stopped drilling at five hundred and sixty feet because there was such a general depression and oil got to be a drug on the market that we couldn't see our way clear to continuing the work. Besides that, the driller was financially embarrassed and we concluded to suspend operations for the time being. We were not rich men. Quite a number of people came out to see us drill. I am familiar with the Barlow and Hill map introduced in evidence yesterday. I have looked it over a good deal. While we were operating there, I met Mr. Barlow in Bakersfield and he called me into his office and he showed me a map which showed our ten sections located by us and our well. The name of our company was the Western Union Oil & Development Company. After we reached a depth of five hundred and sixty feet we were very much financially embarrassed and during the close of the year 1901 we tried to induce further development work in some way by making a contract, but we failed utterly, so we were never able after that to continue the work. We let the locations go by default. They were re-located in 1902. I was one of the locators. It was on the strength of the evidence of oil that I had seen there previously and the drilling of this well that we re-located the land.

Q. Do you know what the general talk and opinion in [38] that vicinity or among oil men at that time was,—that is, in 1900, when you were there, and 1901 and 1902, with respect to whether or not the Elk Hills in general, including the portion of the country that you say you located, and that to the north and west thereof, with reference to whether or not it was good oil property?

Mr. Lewers. To which we object on the ground that it is calling for testimony as to the general impression and is not calling for testimony as to the knowledge of actual existing conditions in the territory. On the further ground that the question is vague and indefinite, in that it does not call for actual knowledge of the existence of minerals in paying quantities, but simply calls for speculation as to what might be in the ground.

A. Yes sir: I talked with people that were in a position in which their opinion was worth something, in my estimation, and they believed there was oil there. Others said, among them C. A. Barlow, "I don't doubt it."

Mr. Lewers. I move that the answer be stricken out on the ground that it is hearsay testimony and not responsive to the question.

Q. By Mr. McCormick. You say they said it was oil land?

A. Yes sir.

Q. What do you mean by that?

A. Well, that there was oil down below the surface if we could just go down after it.

Q. To what extent?

A. Well, they believed it was in paying quantities.

Q. Now, was that fact generally conceded among men interested in the commercial production of oil and in the oil business at that time ? [39]

Mr. Lewers. To which we object on the ground that there is no foundation laid that the witness

knows what was generally conceded among such men, and that it is calling for a conclusion. And we desire the former objection to apply to this also.

A. Yes sir.

No prospectus was ever gotten out by our company, but the Lake View Oil Company got out a prospectus and in it they mentioned our company operating and that there was every indication of our striking oil. That prospectus was published about the middle of the summer of 1901, when we were down about five hundred feet. I have been down in the Sunset Fields and looked over them a number of times and the country where we located compared favorably with it. By favorably I mean from the outcroppings and from what I heard further on about there being blow-outs and the lay of the country and the general contour and so forth, I believed mself that there was oil there and was willing to take my chances on it. I am speaking with reference to the country covered by our locations in the Elk Hills.

CROSS EXAMINATION OF F. D. LOWE.

Our well was sunk on Section 11, Township 31 South, Range 24 East. At a little deeper than five hundred feet we encountered the oil. The total depth was five hundred and sixty feet. When the bit would come up, little drips of oil would break and run down in a little streak. I am certain that it was oil. The only test I made was I put my finger on it and smelled it and I looked at it and I ran my finger through it. I didn't take it anywhere to have it examined. No attempt was ever made to pump oil from that well and

we guit because of [40] depression in the price of oil and financial difficulties. We never sunk any wells on the remaining nine sections. All we did was to run a furrow around the sections and make a roadway to the property. We did not see any oil indications in those furrows and that road, but there was plenty of gypsum on the land. We made no use of it. We were not interested in that material and passed it by without any further thought of doing anything with it. We were after oil. We quit drilling approximately in the latter part of 1901. The depression in the price of oil continued for a long time after we lost our possession and I lost my interest. The depression lasted. I think, a couple of years. I don't know what the price of oil was in 1904. Nothing occurred from the time I made my location on Section 11 up to the fall of 1904 to change my opinion of that territory as oil property. I still held to my opinion that there was oil there and I still believed it was good oil country. In 1902 I was at home near Bakersfield, about twenty miles from the Elk Hills. In 1903 I was in the same place and have been there ever since. I was on the land several times in 1902, but didn't go back there in 1903 or 1904. There was nothing to prevent my going back there in 1903 and 1904, but I still retained my opinion of the land held prior to that time. I was one of the parties that helped to re-locate the land in 1902, and although the depression in oil began to be removed some time in 1903 or 1904, I didn't go back, but still retained the same opinion of the character of the land as oil territory. As a matter of fact, I

152

had a very high opinion of that land as oil territory. Nevertheless I allowed the land to lapse and never went back there. At the time I was in there, the opinion of oil men of this land was good. Their opinion was that there was oil underneath the surface. How far I cannot say, as there were no estimates given. Mr. C. A. Barlow told me he didn't [41] doubt but that it was good oil land. He didn't say that he had made any investigations to determine the depth of it. He did not describe to me the location or position or trend of any anticline in that territory. I talked with the McCutchens about the character of that land in 1901, 1902, and 1903. The McCutchens are drillers and operators there in the Sunset Fields. I talked with Edward McCutchen. I know he had been on this ground. It was while we had possession of it and were operating. He said his opinion of the land was it was good and that he believed there was oil there. He did not state how deep he thought it was. No one ever expressed an opinion to me as to the probable depth of that oil. I made no inquiry as to the depth that oil wells could be drilled at that time with the appliances then available; nothing more than that we had read and had information that wells were beng drilled several thousand feet. They went down two thousand and even three thousand feet in the Sunset Field towards McKittrick. The reason we went back to re-locate in 1902 was because we had a good enough showing there and had spent considerable money on it and I didn't feel like losing my interest. We had done enough work in 1901 to hold it

for the time being, I guess. At the time we quit drilling we figured that we were right close to oil and liable to strike it at any foot on account of the formation and the gas we had and the drips that came up on the bit. I don't know whether that was petroleum gas or marsh gas. We never had a test made of it, only I know that it would burn very nicely. I never tried to burn marsh gas. I took samples of the blue clay to Bakersfield and showed it to a number of people. I think I showed it to Mr. Barlow and another oil man named Mr. Day, and he said it looked great. There were no tests made to determine its character. I don't know what the constituents of this blue clay were. [42]

REDIRECT EXAMINATION OF F. D. LOWE.

When we were down about five hundred feet we struck gas and we lit a paper and dropped it in the casing and when it reached down a few feet there was a terrific explosion.

IRA M. ANDERSON, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am fifty-two years old and was born in Westmoreland County, Pennsylvania. I am in the hotel business, the garage business and the oil business. I reside in McKittrick, Kern County, California. I came to McKittrick in 1901. The first time I was there was in 1900. I have had experience in the exploration and development of the country for oil and in the operation of oil wells and the development and production of oil. I have drilled all over the country; 154

in three or four different states. I had charge of property in a number of places. I drilled in Pennsylvania, I drilled in Kentucky, West Virginia, Texas, and California. I have had charge of a number of different properties, looking after different properties; that was in Indiana and Texas. I have drilled in this State. I have been in the oil business ever since I was fifteen or sixteen years of age. I was raised in the oil country. I first went to Kern County in 1899, to Bakersfield. I came from Texas. When I first went to Bakersfield I was loking over the oil fields. I visited the Kern River Field and the Sunset Field and the McKittrick Field. I made investigation and examination of the country as an oil country, with a view to satisfying myself as to its future possibilities as a country in which oil could be produced [43] economically so as to make it a success commercially. The Sunset, McKittrick, and what has since become the Midway Fields are all about the same. There is not much difference in them. I examined them and investigated them. I discovered indications on the surface of the ground that showed that it was an oil country at that time. I discovered some of those evidences between Sunset and McKittrick. I found oil sands all through there and oil seeping out of the ground and gypsum all through that country. Where you find gypsum you will find oil. I found that in Sunset. At that time they were producing oil in Sunset and McKittrick. Between McKittrick and Sunset the formation was about the same. There were these blow-outs through there, asphalt and oil, and places where you could see what was asphalt around there and gas coming through the center of them. That condition extended generally from McKittrick to Sunset. From my knowledge and experience in oil, it indicated to me that it looked like a good country to get into and invest in. My investigations and explorations extended to the west over into the Elk Hills and Buena Vista Hills to the east. I examined that country. I found shale in there and gypsum and oil sand. I can describe places in the vicinity of McKittrick where I found extraordinary evidences indicating the country to be an oil country. speaking about 1899 and 1900. That was down at Asphalto. That was the name of the station. Then there were indications on Section 34, Township 30 South, Range 22 East. (Witness looks at Plaintiff's exhibit "I" and identifies the place where he made the discovery on Section 34, Township 30 South, Range 22 East.) I found asphalt, oil sand and gas. In the summer when I was through there the sun would melt the asphalt and it raised up and in the center of it there would be gas coming up and if you lit it it would come up like a candle. This asphalt covered over there for probably an acre. These conditions were known in general to [44] the populace around there at that time. It was a matter of common notoriety. In 1899 and 1900 we went to Section 2, the section that cornered on Section 34, Section 2 being in Township 31 South, Range 22 East. I found asphalt in there and oil sand, just the same as in Section 34. It runs the whole way through there in different sec156

tions. When I was in there there were no Elk Hills. We did not call them Elk Hills. They were the Buena Vista Hills. The next place we ran onto it was over in back of the headquarters over in the hills there. I mean Miller & Lux's. I have been along through that ranch from Sunset clear through to the coast and found the indications all the way through there, all the way from McKittrick to Sunset. I have made examinations of the country designated on exhibit "I" as the Buena Vista Hills and I found shale in there and oil sands. I found about the same general conditions as I have designated on Sections 34 and 2. I know where the Elk Hills are. I went through them at that time. I found a shale in there, a brown shale, a clay that lay on top of the sand. I found brea there in the fields, in the Elk Hills. I made chloroform tests of the earth and rock and shale that we found in the Elk Hills. The tests showed oil and oil sand. As to my opinion as to whether or not the Elk Hills was oil producing territory, the formation was there to show that it was. The shale is there, the clay is there and the oil sand is there. I found blow-outs in the Elk Hills. There was a place across from Miller & Lux's headquarters where the gas blew out. This blow-out was eight or nine miles south and west from the headquarters. It was on the east side of the summit line of the Elk Hills, pretty near the top of the line or ridge of those hills. I drilled for Fred Sarnow in three different places on the hill right above McKittrick in Section 29 and we drilled about two miles north of McKittrick; I think it was on

Section 19, and then on Section 6. Sections 19 and 6, I think, were in Township 30 South, Range 21 [45] East, and Section 29 was in Township 30-22. I knew J. B. Treadwell while I was employed as a driller. At that time I understood he was there with the S. P. The S. P. at that time were in there hauling out oil. I don't know what else they were doing. I heard of the S. P. lease in that country at that time. That lease was on Section 29, Township 30 South, Range 22 East. That is the Section 29 that I worked on. I worked on the S. P. lease. I am positive about that description. I was paid by Sarnow by check. While I was working there I lost a finger. I went to a hospital in San Francisco; Southern Pacific Hospital. In going to San Francisco I took the Southern Pacific from McKittrick to Bakersfield and from Bakersfield to San Francisco. I didn't pay any fare. I had a pass. I got the pass, I believe, from Sarnow. I know Mr. Burkhalter. I think that at that time he was Roadmaster of the Southern Pacific Company. I mean the company operating the railroad between McKittrick and Bakersfield to San Francisco. It didn't cost me anything for physician's fees or services or hospital attendance while I was in the hospital in San Francisco. I don't know how it was paid. I paid hospital fees while I was working at these places on this lease in McKittrick. I paid fifty cents a month, which was taken out of my salary. In case of accident or sickness it was to pay hospital and doctor's and medical expenses if I was injured or taken sick while working there. It was taken from my salary each month. That was true of the other men also that worked on those oil wells. I worked on and off there two or three different times. I couldn't say just how long; not very long at any one time. I started to work in that employment along in 1900. I worked off and on for Sarnow for two years, I guess, or a year and a half, probably. I don't remember whether this fifty cents a month was taken from my wages during the entire time I was working for Sarnow. At the time I took this trip to San Francisco to the hospital, Sarnow [46] was over there at the time. I was in the hospital longer than a month. There were other patients in the hospital at that time; most all people who were working for the Southern Pacific Railroad. There were trainmen and oil men and people working in the field. I went back to McKittrick when I recovered. I didn't pay any fare. I got a pass to go back on the same line to Bakersfield and then to McKittrick. I went to Me-Kittrick at that time. Before I went to McKittrick I went to see Mr. Burkhalter and he gave me a pass to McKittrick. I saw him at the Southern Pacific Depot. I knew Mr. J. B. Treadwell. I met him a number of times. He was in that vicinity off and on a number of times,-while I worked in and around McKittrick as I have testified. I know of his locating oil land while I was there. He located it right north of McKittrick. I couldn't say about how much he located. I don't know whether he located alone or not. He located the strip that runs from McKittrick to the North-End Field. He located it for min-

eral, oil and asphalt. The property on which I was working at the time I had the accident to my finger was commonly known in that vicinity as the Southern Pacific Lease. At that time the old camp was right in the town of McKittrick. The well was right at the hill above the old town site. The well was about a quarter of a mile from the town. I know Mr. Henry M. Thompson. At the time I worked on the Southern Pacific lease he was connected with the operations of the same, I believe he was bookkeeper. I know Mr. E. T. Dumble, the geologist. I saw him in that vicinity in 1902. I saw him prior to 1902. I know Mr. Josiah Owen, the geologist. I have seen him in that vicinity. It was along about 1902 or 1903. While those two men were there, they stopped on the Southern Pacific lease up at the north end. That was about two miles from where I worked. I have seen these two men there together. They were driving around over the country. They were mineralogists. [47]

- Q. Do you know for whom they were working as mineralogists or by whom they were employed as such?
 - A. I do not.
 - Q. Did you ever hear that spoken of?

Mr. Lewers. Objected to as calling for hearsay testimony and not the best evidence.

- A. I have.
- Q. By Mr. McCormick. What did you hear about it?
 - A. That they were S. P. mineralogists.

- Q. When you use the term "S. P.," what do you mean?
 - A. The S. P. Railroad.
 - Q. The Southern Pacific Railroad?

The Southern Pacific Railroad. Wherever S. P. appears in my testimony it means Southern Pacific Railroad. These two men, Dumble and Owen, drove around over the country in a rig that belonged to the S. P. They were driven around by a man who we called "Old Dad." He was employed by the S. P. at the time he was driving these men around over the country. They drove all over the country. I can't say that I ever saw them driving towards the Elk Hills. I was present when these two men found shells around there. I think it was along in the spring of 1903. It was out on the lease where I was working for the U.S. Oil Company on Section 6, Township 30 South, Range 21 East. Mr. F. J. Sarnow was my boss at that time. They found the shells in the oil stains in that section. They were over there and we had an argument about what oil originated from and I told them that I thought it came from dead matter and he said it came from the mica in the shale, and i says, "I know better than that because I found oyster shells; solid shells, where you find it in the center of the shell, and there is no chance for it to get in there, because it was right in the shell." And I saved some of them when they came back and gave it to Owen, the mineralogist. [48]. I found an anticline running through the Elk Hills. It runs northwest and southeast, I believe. It is about on the line from McKittrick to the Elk Hills. I found that anticline, or evidence of that anticline, in the immediate vicinity of where I saw this blow-out in the Elk Hills.

CROSS EXAMINATION OF IRA M. ANDERSON.

That anticline runs generally southeasterly and northwesterly right straight through. I know what are now called the Elk Hills. They were the Buena Vista Hills then. To the south of these hills there is quite a flat plain before you strike the other range of the Buena Vista Hills. One of the anticlines passes direct through the Buena Vista Hills. A second anticline begins about nine miles from old headquarters. That sand goes through there. That is what I call an anticline. I don't know whether it is or not. By the old headquarters I mean the Miller & Lux old camp. The evidence that I found of the existence of that anticline was asphalt and oil sand. The last time I saw the asphaltum deposit was a couple of years ago. As you travel from McKittrick in an easterly direction through the flat, you can see that deposit to the right; some of it is to the right and some on the left. The asphaltum on the left is about a mile from McKittrick. The flat is all covered with it. Looking at this exhibit, here is McKittrick and that dotted line indicates a wagon road leading down through the flat, down towards the Buena Vista Lake. To the north of that is what is called Elk Hills now. To the south of that is what is labelled on this map as the Buena Vista Hills, a narrow range of hills compared with what is marked as Elk Hills. I am referring to the flat lying to the north of this narrow range of hills and the one which leads [49] right over to the Buena Vista Hills. Now in following this road out of McKittrick down through that flat, you could see asphaltum to the left as you travelled in that southeasterly direction. It is in that valley; it is all over the flat. It is up there in the northeast corner of Section 26, Township 30 South, Range 22 East, and on Section 22 in the same township and range. I have seen deposits of asphaltum or brea north of that in this range of hills called the Elk Hills on this exhibit "I." It was over there about seven or eight miles from the old headquarters camp, the dredger camp, southeast from the headquarters ranch about seven or eight miles. I have gone to this deposit from the headquarters ranch and in doing so travelled southeast. I first saw this deposit in 1900, when I first came in the country, and I based my conclusions that an anticline existed there from this surface showing of brea and asphalt and from the oil sands and stuff in there. I made no examination of the country to determine the stratification but the parties that were with me did. Tom Malone and a man named Scott were with me. They discovered it in my presence. It shows for itself right there from this oil sand, southeast of Miller & Lux's ranch headquarters. When I first went into that country I knew nothing about the Elk Hills. It was always called the Buena Vista Hills by me. I never heard of the Elk Hills until the last few years. There is quite a pronounced anticline near the town of McKittrick and to the south and west of it. I believe only the east side of that anticline shows. It dips away from the town of McKittrick.

REDIRECT EXAMINATION OF IRA M. ANDERSON.

The Headquarters Ranch and the Dredger Camp that I spoke of are two different places. I know where the Buena Vista Lake is. It is near to the Dredger Camp. The Dredger Camp is on [50] the canal. The old headquarters ranch is not on the canal. What we used to call the Deep Water Ranch is right on the canal. The time I went to the blow-out in the hills I went from the Dredger Camp, which is about nine miles from Buena Vista Lake. McKittrick lies north and west from Dredger Camp. I went in that general direction from the camp to this blow-out. The railroad that runs to McKittrick is the one that runs through the railroad out within a half a mile of which I found the asphalt deposits I spoke of. The railroad cut that I mentioned is about two miles from McKittrick, and the cut is about half a mile in length with hills on both sides of it. The cut is very pronounced and this asphalt that I mentioned I found within a half a mile of the railroad is on the righthand side going from McKittrick to Bakersfield.

RE-CROSS EXAMINATION OF IRA M. ANDERSON.

In going from the Miller & Lux Ranch, which I call the Dredger Camp, to this blow-out, I went pretty nearly northwest about seven or eight miles.

REDIRECT EXAMINATION OF IRA M. ANDERSON.

I did not go right up the canal; I cut across the Buena Vista Hills [61]

F. J. SARNOW, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am living in East Bakersfield. I am forty-two years of age and have been engaged in the oil business seventeen or eighteen years. I first went into the McKittrick Field in 1899. I was hired by Mr. J. B. Treadwell at Summerland to go there. Before I went there I was drilling oil wells at Summerland. When I came up from Summerland to McKittrick I shipped two rigs up there. One was a standard rig and the other a portable Star rig. They were shipped on the Southern Pacific Railroad and no freight was paid. They were shipped to the Southern Pacific Company, care J. B. Treadwell, McKittrick, I drilled eleven wells in the McKittrick field for the Southern Pacific Railroad. Ten of them were producers. Mr. Treadwell at that time was working for the Southern Pacific Railroad. He was the head of the Oil Department. I have seen Mr. Huntington and Mr. Kruttschnitt at McKittrick. It was in the last part of 1899 or the first part of 1900. At that time I was at McKittrick on the Southern Pacific property there, and they came out there where I was and Mr. Treadwell was with them. There were six or seven railroad officials came there at that time and Mr. Treadwell introduced me to them. I was introduced

as "our foreman" by Mr. Treadwell. I know the Elk Hills. In those days they did not have a name, but they were referred to as the Buena Vista Hills. In those days there was no development in the Elk Hills. When I first went to McKittrick I put down the first well there that made a well. That was in 1899. There were some wells there at that time at old Sunset. Old Sunset is four miles past Sunset in going from McKittrick. I have been in the Elk Hills and I consider them as oil territory, although it was expensive territory. I had a talk with Treadwell about different lands. He [52] thought there was oil in those hills, although it would be expensive. I am acquainted with the country all the way through and know the top of those Elk Hills. I have been through there in different parts and the land is not valuable for agriculture. The rainy season there is from December to March. The surface of the ground on top of those hills is rough and barren. The only vegetation is some sagebrush, unless there is an amount of rainfall, when there is a little grass grows, which does not last for very long. I know Mr. Treadwell was in the employ of the Southern Pacific Company as an oil expert through my connection with him and with the Southern Pacific Railroad Company. We were furnished with regular Southern Pacific letterheads, envelopes with "Southern Pacific" stamped on them. If we wanted any material in 1900 and from then on, any materials needed on the lease, that is, for the Southern Pacific work, we had to send a regular requisition to San Francisco. Passes were

issued to any of the men that were working there. I would wire to Burkhalter and passes were sent. And if we wanted them quick, it would be sent by telegraph. Any business from Wells Fargo or the Western Union was franked. I once paid a bill to Wells Fargo and I was told not to pay any. All freight that was sent was tagged S. P. The name of the article was on and what division it was on. Out there it was shipped S. P. Company, care J. B. T. The time sheets that we made out there we made out on regular Southern Pacific time sheets, about 18 inches by 20 inches. All the employees had to sign them when they got their check. Treadwell had one of these gasoline velocipedes that the Southern Pacific used for track inspectors. It was kept in the S. P. shops at Kern, and he would come out there and then take it back to the Southern Pacific. The railroad officials that would come out there-I don't remember that Kruttschnitt was out there with Huntington -but they were out there four or five times. There was one time H. E. Huntington came out. But I [53] know they came out four or five times. Any machine work that they could do in the Southern Pacific Railroad shops was sent down there to be done in their shops. All the employees working on the property, outside of my own contract work, had to pay hospital dues, and it was taken out of their checks. The hospital that I referred to is the Southern Pacific Hospital in San Francisco. I sent four or five different men there on passes. When anybody got hurt I had a wire pass sent from Burkhalter at Bakersfield, and

I would wire the S. P. surgeon at Kern to meet them, and he would meet them and examine them and see if he could do anything for them; and if he couldn't, he would get a pass and send them to San Francisco Hospital--if it was anything serious. J. B. Treadwell was on the McKittrick payroll drawing \$300 a month from the Southern Pacific. When I refer to the Mc-Kittrick payroll I do so to distinguish it from the Kern Field, which had its own payroll. Mr. Treadwell had talked to me about Kruttschnitt and the credit he had with most all the banks around. Southern Pacific furnished the money. I remember his telling me that he had some leases in Spindletop. Texas. He also showed me some passes. He had his yearly pass on the Southern Pacific, on the Santa Fe, a Pullman pass and passes on the United Railroads and passes on the electric cars in Los Angeles. I don't remember what company it was in Los Angeles that he had passes on, but he said he got them all through the Southern Pacific. I was discharged by Mr. Treadwell by letter. The letter discharging me is plaintiff's exhibit "J-1" and "J-2". I am acquainted with Mr. I. M. Anderson, who was on the stand just before me. I also know Mr. Henry Thompson. Anderson worked both for me and the Southern Pacific. Henry Thompson was my bookkeeper out there for the Southern Pacific. Sometimes Mr. Treadwell would come out to the fileds and stay a week and then again he wouldn't come for two months. Sometimes he would stay a [54] day. He was in the business of acquiring oil lands or lands valuable

168

for oil for the Southern Pacific. It was his custom, wherever he would hear of a strike of oil or good prospects of oil sand discovered, to look at it. That is how he came to go into the McKittrick Field. He told me that he kept plats or maps of the country on which he marked down the places. I knew Josiah Owen by sight. I saw him around McKittrick while I was there. My knowledge and belief was that he was a geologist of the Southern Pacific Railroad Company. He used to come out there and ride around in the Southern Pacific buggy. Sometimes he would be alone and sometimes somebody would be with him. When he was at McKittrick he stopped on the lease or at the hotel. He would stop at the south end some and at the north end some and sometimes at the hotel right in town. I saw him out there a good many times; possibly fifty or sixty times, from the time he went into the employ of the Southern Pacific after Treadwell was out, until within about five years ago. I don't know just what year Treadwell left there, but Owen came there after Treadwell left, which was before 1904. I knew E. T. Dumble by sight. I never knew whether it was Dumble or Owen that took Treadwell's place as oil expert for the Southern Pacific. I understood it was both of them took the place Treadwell had. Dumble was a man about fifty-five years of age. I saw him there possibly fifteen days during the same year that I saw Mr. Owen there. He was doing just the same as Mr. Owen-driving around the country with the Southern Pacific's team and he stopped either at the Southern Pacific lease at the

south end or the north end. I know Mr. Treadwell located some land. I don't know for whom he located it. I don't know of his locating any land in the Elk Hills. I have seen oil outcroppings in the Elk Hills. They were located on Section 14, Range 22 East, Township 30 South. There are oil crops and sand on the east side of the railroad there on [55] that section and there is dry oil and over flow on the west side of the wagon road. The wagon road is on the west side of the railroad. There is oil-there is some others there. I don't know what sections they were on, but I saw several different spots where there were oil crops. I never went right on the ridge and travelled right through on the Elk Hills. I maybe went up the canyon and travelled the ridge a mile or two and then would go down again, I saw four or five outcroppings of sand on the Elk Hills. I know where the Miller & Lux ranch is on the canal, the one that is called the Old Headquarters. I know of oil sands in the hills southwest of Miller & Lux's ranch. They were around in that country about Section 25, Range 23 East, Township 30 South, and Section 30, Range 24 East, Township 30 South. I am not positive whether it was exactly in those sections, but it was in that neighborhood, as I never came up from Miller & Lux's Headquarters that way. I know of oil croppings or sand between McKittrick and Sunset in the Tembler Range. There are quite a few outcroppings of oil sands and blow-outs northeast of the Tembler Range or north of it. They are on the small hills through McKittrick called the McKittrick Hills.

There are some outcroppings between Sunset and Maricopa, probably two or three miles from Sunset towards McKittrick.

CROSS EXAMINATION OF

F. J. SARNOW.

When I speak of Mr. Treadwell, I speak of him as the head of the Oil Department of the Southern Pacific Railroad. I worked for J. B. Treadwell and the Southern Pacific Railroad Company. The time sheets and letterheads that I used and the envelopes marked "Southern Pacific Railroad Company" are the [56] same as the one introduced as an exhibit, "J-1". I understood I was working for the Southern Pacific Railroad Company. I never saw C. P. Huntington out there, but I did see H. E. Huntington. I was there continuously from 1899 up to 1907 or 1908. I was not employed by Mr. Treadwell after March 28, 1901. The first well which I put down in McKittrick, which was a real well, was a little over four hundred feet deep. That was in 1899. Prior to that time I had been engaged in the oil business about five years at Summerland. My experience has been in California exclusively and I was quite familiar with the methods then in vogue of sinking wells. I had had four or five years practical experience. I had made no extraordinary study of the method of sinking wells. Before 1899 I had drilled wells by contract and drilled some of my own in Los Angeles. I had drilled some wells over a thousand feet. The depth would all depend on the formation you were

going through and what kind of a hole you had; whether it was a wet hole or a dry hole. The deepest well I had drilled up to that time was something over a thousand feet. It was in Los Angeles. There were a lot of them in Los Angeles over a thousand feet in depth in 1899. I never heard expressed how deep it was possible to go at that time, although I was in the oil business exclusively. There is no maximum depth today, but it depends on the formation of the hole. In 1904 there was a well in McKittrick some 2250 feet in depth and it was the deepest in McKittrick at that time. I don't remember the first time I went to this sand blow-out in the Elk Hills, as I went there so often I never kept a record of it. It was all between 1900 and 1907. Prior to 1904 I considered the Elk Hills as oil territory, although it was expensive. There is no water in that country. It would have to be hauled, and water was expensive at McKittrick, and to ship it by railroad it would be expensive that way. And the territory was quite deep, that is, deeper than it was around [57] McKittrick where we were drilling at that time. The wells were not very deep there at that time. You could get wells not deeper than a thousand feet, and where I was drilling you could get them 350 or 600 feet, and if you went fifteen or sixteen hundred feet it would be considered a deeper hole than what we would consider over there, considering what we were drilling on. You have to have water to drill a well. I never heard of one being drilled dry. Water was one of the factors which I took into consideration in passing on the

territory as a prospect, and the reason I regarded the Elk Hills as expensive was because it did not have water and because I thought it was probably deep. I thought the depth would be 1500 or 1800 feet, which at that time was too deep for practical operations and besides we had plenty of territory that we were drilling on. I was interested in locations in the Elk Hills. They were on this blow-out. Associated with me were John Jean and my brother and Treadwell and several others. The location was made by oth as and they put my name in, but I don't know that I was in that particular place or not, as I was not there at the time when the location was made, I have no interest in that location now. I don't know what became of it. I never took any steps to go ahead with it as I never had the money to invest. I did not endeavor to interest anyone else. I understood Mr. Treadwell had a great deal of money, but he did not use any of it in developing that particular territory, to my knowledge. The Southern Pacific lease that I spoke of is close to the present town of McKittrick. Our camp was put on the Southern Pacific right of way when we started in. The oil wells were located on the ground which belonged to the Buena Vista Oil Company. The Southern Pacific Company leased from what was called "Our Own Oil Company" and they leased from the Buena Vista Oil Company, and it went through one more lease and then it was turned in to the El Dorado Oil Company. It went through [58] two or three more leases and was then sub-leased to the Southern Pacific under an option to buy it. The

Southern Pacific operated that well for the purpose of obtaining fuel for use on their lines. They used the oil for that purpose and the engines used to take the oil at McKittrick from the oil produced on the south end. Southern Pacific lease. When I wanted a pass I had no trouble in getting the same, but would either write or wire Burkhalter and he would send it to me. Whenever men were injured on the lease they went to San Francisco on the passes. I had trouble with Treadwell in 1901, resulting in his writing the letter of dismissal to me. He had had some difficulty with my brother and he told me he did not want him on the property. During the Christmas time my brother came and paid me a week's visit and when Treadwell heard of it he was pretty mad and he came up there, as he said, with the intention of letting me out. I told him to do whatever he wanted, so the next day I got the letter of dismissal from him. I kept it as it was the only time I have ever been discharged. I felt that I was unjustly discharged and I felt sore, as I thought it was mere boy's play, the way it was done. I have nothing against Treadwell, as he is a good man to work under. I have nothing against the Southern Pacific, although I felt sore at the time. I don't feel sore any more, as I found out I could get along with out the Southern Pacific and Treadwell. I am testifying to the truth. That is all I am testifying to. It is nothing to me who wins the suit. It has nothing to do with my locating of the oil sands on Section 25, in Township 30 South, Range 23 East, as the sand is there in that neighborhood. I am now drilling in that

same anticline on Section 6, Township 30 South, Range 22 East. I have drilled three wells there and worked on the fourth. I base my conclusion that there is an anticline there because it runs from near Buena Vista Lake, where that blow-out is, to thirtyfive [59] miles northwest of McKittrick, and I have drilled six wells on that same anticline, and sometimes you don't see it for a couple of miles and then it crops out again with blow-outs of oil sand. This anticline is an outcropping of oil sands and blow-outs and the formation surrounds it. The formation is shale, clay and gypsum. The oil sands show stratification from which you can determine it is an anticline. They show stratification on Section 36 in the same township and range that Section 6 is in, that is, 29 South, Range 21 East. I drilled two wells on Section 6 eight or nine years ago and just finished one there last week. I drilled two further up about eight miles further west, possibly ten years ago, along in 1901 or 1902. I have not drilled any wells at any point east of the Elk Hills and north of Buena Vista Lake, as I don't think that anticline is over there, and I don't know of anyone drilling over there.

M. S. WAGY, called on behalf of the plaintiff, having been first duly cautioned and solemnly sworn to testify the truth, the whole truth and nothing but the truth, testified as follows:

DIRECT EXAMINATION

By Mr. Mills:

Q. Where do you live, Mr. Wagy?

A. San Francisco.

- Q. Are you a relative of J. I. Wagy?
- A. Yes sir.
- Q. A cousin?
- A. Yes sir.
- Q. Were you in the Elk Hills at any time locating lands for oil purposes?
 - A. Yes sir.
 - Q. About what was your first visit there? [60]
 - A. 1899 or 1900; along during that time.
 - Q. How came you to locate land there?
- A. We found what we thought was an indication of oil there.
 - Q. Describe those conditions.
 - A. A break or blow-out-seepage.
- Q. Can you tell me where that location was? That is, that discovery?
 - A. It was on the northwest quarter of Section 32.
 - Q. In what township and range?
 - A. 30-24.
- Q. Will you give a detailed description of what you found there?
- A. Well, we found gypsum there and Fullersearth—that is, in that immediate country.
 - Q. I mean in this outcropping?
- A. There was a gulch right down through there and this outcropping was caused by the wash washing surface dirt away. It might have been that, but it cropped there.
- Q. What was the nature of the oil sand that you found?

- A. It was practically dead sand. There was an odor in it of oil in it or petroleum.
 - Q. Was it stained?
 - A. Oh yes; it was black.
 - Q. What was it, oil sand or not?
 - A. Yes sir.
- Q. How did you come to go in there? Who got you to go in there?
- A. Mr. Drouillard. He had told me about those indications of oil.
- Q. He was the gentleman who was on the stand in the early part of this hearing?
 - A. Yes sir. [61]
 - Q. Did he go there with you?
 - A. Yes sir.
 - Q. Have you done any oil developing yourself?
 - A. Yes sir.
 - Q. Where abouts?
 - A. Kern River field and McKittrick, and Temblor.
 - Q. Anywhere else?
 - A. No sir.
- Q. How extensive has been your work? How many years?
 - A. Since 1898.
- Q. Who were your associates that you were interested with in the Elk Hills because of that discovery?
- A. At that time I don't know as I could tell them all. There was quite a number of names used, mine among others.
 - Q. Can you recall some of the names?
 - A. Mr. Drouillard and Charlie Lamont, T. A.

Baker of Bakersfield. I think we used our wives names in some instances.

- Q. Was Mr. Youle in it?
- A. Not at that time he wasn't.
- Q. Was Mr. Packard?
- A. Yes sir.
- Q. One Roper?
- A. J. T. Packard was one of our associates at that time.
 - Q. Was Mr. Blodget?
 - A. No sir: Not at that time.
 - Q. Did you locate more than one section of land?
 - A. Yes sir: we located a number of sections there.
 - Q. How many sections did you locate?
- A. That has been a good while ago. I don't just remember the number. I can't recall now just the number of sections. We took everything that looked good.
- Q. Did you locate any lands in 30—23 and in 30—24? [62]
 - A. Yes sir.
- Q. About how many sections did you locate altogether?
- A. To the best of my recollection I was interested in eight or ten sections. I can't be positive of that. I didn't keep any record of it.
- Q. Did you try to burn any of that asphaltum or deposit that you found there or for fuel?
 - A. Yes sir; we used to throw it on the fire.
 - Q. State whether or not it would burn?
- A. Oh yes; it would make a smoke and smell and it would blaze up after it het up.

- Q. Give any odor of oil or gas?
- A. Yes sir.
- Q. Who paid the location expenses?
- A. I paid some of them and I suppose the others done the same. I don't remember just now. I know I paid my proportion of whatever it was.
 - Q. What year was that?
 - A. 1899 first, and then I was in there in 1900.
- Q. Did you sell out your interest in those locations?
 - A. Yes sir.
 - Q. Whom did you sell to?
- A. To Burt Packard, known as Burt Packard, an attorney—or Burt Packard. I forget his initials.
 - Q. By Mr. McCormick-H. L.?
 - A. H. L., yes sir.
 - Q. By Mr. Mills-How much did you get?
 - A. I got three dollars an acre.
- Q. Do you know whether there was any tunnels or shafts dug in the Elk Hills near those locations or by any other parties?
 - A. There was later on. [63]
 - Q. Did you see it?
 - A. Yes sir.
 - Q. How deep was it?
 - A. Maybe tweenty feet. I never measured it.
 - Q. Did it show any indications of oil?
 - A. Yes sir.
 - Q. Do you know a man named J. B. Treadwell?
 - A. Yes sir.
 - Q. What was his business at that time?

- A. The oil business.
- Q. Who was he working for?
- A. I don't know.
- Q. Whom did you understand he was working for?

Mr. Lewers—Objected to on the ground that it is calling for a conclusion, and hearsay.

A. I understood he was working for the Southern Pacific Railroad.

S. Do you know whether or not he was in there for the purpose of making oil locations?

- A. He made oil locations.
- Q. Where abouts?

A. There was a number of locations. They were around McKittrick or in that neighborhood.

Q. Did he make any locations in the Elk Hills?

A. Not to my knowledge.

Q. Do you know a man named Youle?

A. Yes sir.

Q. Did you know him at that time?

A. Yes sir.

Q. Were you in any of the locations in which he was interested?

A. Not at that time. I was not interested. [64]

Q. Do you know whether he became interested subsequent to that time?

A. Yes sir; he became interested—yes, after I had sold out he became interested.

Q. Did you recognize any anticline where you made those locations?

A. I recognized what we called an anticline.

Q. Describe it. What was it?

A. It was the general trend of that ledge through there, and the formation pitching to the southwest. I believe that it was what they call an anticline. I don't know.

- Q. In which direction was it running?
- A. Northwest and southeast.
- Q. Was Drouillard the man that first made the discovery there?
 - A. That is the first I know about.
 - Q. He told you about it?
 - A. Yes sir.
 - Q. Was he regarded as a geologist?
- A. I considered him very good at that, and a very close observer.
- Q. What is your opinion of the Elk Hills as an oil territory?
 - A. I think it is good.
 - Q. Was that your opinion as early as 1899?
 - A. Yes sir.
- Q. What is your reason for regarding that as a good oil territory?
- A. Well, we had the same indications as we had where we were getting oil. Better indications than in the Kern River field where we were getting oil.
- Q. What was Mr. Drouillard's opinion of it, if you know.
- A. I talked with him about it in a general way. He thought it was good. [65]
 - Q. When did you have that talk with him?
 - Q. 1900 or 1901 or somewheres about that time.

Q. Have you ever noticed any oil stains in what is known as the Buena Vista Hills south?

A. There is what we call a break there running there—I forget the section that is on now, because I never located any land there or ran out the sections.

Q. Do you know of any other indications of oil around that territory?

A. In the Elk Hills?

Q. Yes.

A. There was an outcropping on 26.

Q. In what township and range?

A. 30-23.

Q. What was the nature of that outcropping?

A. It was not as good as the one on 32. In 30-24.

Q. What is the nature of the surface of the hills there?

A. They are very rolling and very rough; unless you get on a ridge or in the gulch you can't drive through that country, or couldn't at that time, because there was no road.

A. Are those lands covered with vegetation?

A. No sir.

Q. What is the nature of the soil there?

Q. Shale and sage brush.

Q. Any water?

A. No sir.

Q. Is the land susceptible of economical agriculture?

A. No.

Q. Do you know a man by the name of Josiah Owen in his life-time?

- A. I have met him.
- Q. What was his business? [66]
- A. Well, he was looking—he was what we call a geologist. He was looking at all those seepages and breaks. He was making examination of them in the different districts there.
 - Q. Around the territory you have mentioned?
 - A. I don't know that he was over there.
- Q. Did you ever show him the sand taken from Section 32?
- A. I showed him what came from there and told him where it came from.
 - Q. When was that? What year?
 - A. I think that was in 1900.
- Q. Subsequent to that time did you have any talk with him?
 - A. Yes sir.
 - Q. How long after that?
- A. During the time he was there—1900 or 1901 or somewhere along about that time.
- Q. What did he tell you about that country, if anything, at that time?
- A. Mr. Lewers—To which we object on the ground that it calls for hearsay testimony without any foundation being laid to show that Mr. Owen was authorized to make representations or statements for any of the defendants in this case.
 - A. He thought that was good.
- Q. By Mr. Mills—Did he say he had been out there?
 - A. He didn't say at that time. He said he thought

that was an oil district. He did not tell me that he had been out there, but he told me lots of places that he thought was good or bad that I never asked him if he was there, and I supposed he was there.

Q. You told him about this oil sand. Did he at that time state where it was?

A. No, he didn't know where it was, he said, and he didn't know. [67]

Q. Did he know after that time where it was?

A. Yes sir.

Q. Did he state to you after that that he was out there and knew where that oil sand was?

A. He said he knew where it was. We compared notes quite often on the country. He was traveling over the country a great deal.

Q. How often did you talk with him about the different parts of the country there?

A. I can't tell. Most every time we would meet or get together, either in Bakersfield or McKittrick.

Q. Did you discuss oil territory with him?

A. Yes sir; in a general way, about where those breaks occurred and where they ran and so forth.

Q. Now, referring to the Elk Hills, didn't you say to me yesterday that Mr. Owen had been out in the Elk Hills?

A. I don't know. He might have. I naturally supposed he was out there.

Q. What made you think he was out there?

A. He passed on the territory.

Q. Did he show a knowledge such as he would get from personal observation in his talk to you?

A. Yes sir. But that was about all the talk we had. He passed on it as good. We were all trying to get information as to where the oil belt was in that country, in that district.

Q. Did you tell him where you had your locations?

A. Yes sir. But I had sold the locations at that time.

Q. That was in 1901, you say?

A. I think that was the date. I can't be positive about the year.

Q. Did you see any plats or maps of Mr. Owen at that time?

A. No sir. [68]

Q. Or during any of these talks you had with him?

A. No sir.

Q. What, if anything, did he say about holding on to your locations?

Mr. Lewers—I object to that as leading and suggestive; and I object to the constant leading nature of the questions. You might as well read Mr. Owen's alleged answer into the record. The witness is intelligent and able to tell what it was.

A. I think I had sold my locations at the time I talked to him.

Q. By Mr. Mills—The first time you talked with him had you sold your locations?

A. I don't know if I had then, but I think a little later on.

Q. You are not positive that you had sold them at the time you talked with him?

- A. Not the first time.
- Q. Did he give you any advice as to the locations the first time you talked with him?
 - A. No.
 - Q. Did he at any time?
 - A. Later on he told me that that was oil territory.
- Q. Is Mr. Baker that you have mentioned a geologist?
- A. He is a prospector, I guess. That is what you call him. He acted in that capacity at that time.
- Q. Have you any locations in the Elk Hills now, Mr. Wagy?
 - A. No sir.
 - Q. You sold out all your interests?
 - A. Yes sir. [69]

CROSS-EXAMINATION OF M. S. WAGY.

By Mr. Lewers:

- Q. Do you know what became of those locations that you made in there?
 - A. No sir.
 - Q. Have you ever been back since that time?
 - A. I was over that district a year ago.
 - Q. Were you in that portion of the district?
 - A. Yes sir.
- Q. Was there any work going on in that territory that you had originally located?
- A. There was several rigs in there, some of them drilling and some of them just derricks.
 - Q. Where were they?
- A. Some on 28 and some on 26, and I think there was—I couldn't place it, just going there going over

it—on the sections. I think it was on 31 and 32. Somewheres in that district.

Q. They might have been on 30?

A. Yes; it was in that neighborhood. I didn't stop to establish any corners.

Q. Do you know of Mr. Packard now having any interest in that territory?

A. No sir.

Q. Have you ever had any talk with him since that time?

A. Up to the time of his death, yes.

Q. Mr. Packard is dead?

A. Up to the time of his death.

Q. When did he die?

A. I think it is about three or four years ago. [70]

Q. Did he ever tell you whether he had kept those locations or not?

A. No.

Q. Did you ever learn from any conversation you had with him whether he had kept up his location work?

A. Yes; they were doing their location work after I had sold.

Q. How long?

A. I don't know how long they continued.

Q. Isn't it a fact that the claims were relocated in 1903?

A. They might have been.

Q. Were they not relocated in 1901 or so?

A. I haven't any knowledge about it.

Q. Did you and your associates do all of the nec-

essary location work?

- A. I didn't do any.
- Q. You sold out right away?
- A. Yes sir.
- Q. That was at a time when there was some considerable speculation in oil lands?
 - A. Yes sir.
- Q. And a great deal of territory was being located and disposed of without any actual development?
 - A. Yes sir.
 - Q. A considerable excitement, was there not?
- A. It was just the man that could make the best guess where the oil was that made the money.
- Q. And to your knowledge there was a great many claims located on territory which has since proved unproductive?
 - A. Yes sir.
- Q. It was the same old story of locating every old thing in the country because there was a good strike in one place? [71]
 - A. I didn't do that.
 - Q. I am not speaking of you.
 - A. Oh yes. Others done locating every where.
 - Q. That had some influence on you, didn't it?
- 'A. No sir. I wouldn't go to locate a piece of land that wasn't good. I wouldn't put money into a proposition of that kind.
- Q. I didn't make myself clear. What I mean is when you found this blow-out or what appeared to be oil sand, although you did not discover anything more than that, that looked promising enough so

that, considering the general situation, you were willing to make a location?

- A. Yes; that was good enough for me.
- Q. But you did not endeavor to hold on to it yourself and never made any effort to develop it yourself?
 - A. No sir.
- A. And, so far as you know, your successors, did not, did they?
 - A. Not that I know of.
- Q. You say that this blow-out that you have referred to was in Section 32, Township 30-24? Is that correct?
 - A. Yes sir.
 - Q. How do you fix that location?
- A. Well, we ran it out in lines and in surveys, and carried that survey right through in all that locating.
 - Q. Was that territory surveyed at that time?
 - A. No sir.
- Q. Then you had to construct for your own purposes lines along where you proposed the government lines would run? Is that correct?
 - A. We know where they are now.
- Q. Had the government lines been run at that time? [72]
 - A. The township lines had.
 - Q. Of which township?
- A. We commenced at 30—24, at the corner down near the Headquarters Ranch.
- Q. Had that township been run and surveyed by the government prior to the time you went in there?
 - A. The township corners had been established.

- Q. But it had not been divided into sections?
- A. No sir.
- Q. You started from the township corner and constructed the section lines in order to locate yourself?
 - A. Yes sir.
 - Q. You started near the Headquarters Ranch?
 - A. Yes sir.
 - Q. You mean the Miller & Lux ranch on the canal?
 - A. Yes sir.
- Q. How far and in what direction from the Miller & Lux headquarters on the ranch was this blow-out?
 - A. It was southwest.
 - Q. How far?
- A. I don't know. I never measured it. I never went that way, because we couldn't travel that way. It was five miles or six or something in that neighborhood.
 - Q. Down on to Section 32?
 - A. Yes sir.
- Q. You located in all, as near as you can recollect, how many sections?
 - A. I don't remember now.
 - Q. As near as you can recollect?
 - A. Probably there was from six to ten sections.
 - Q. You went in by the wholesale?
 - A. Yes sir. [73]
- Q. There was no possibility with the means you and your associates had of developing that territory?
 - A. Yes, we had ideas.
- Q. But did you have the means to back up the ideas?

- A. We might have had.
- Q. That is, you might have raised the money?
- A. Yes sir.
- Q. If you had struck anything good enough you were in a situation where you could interest capital?
 - A. Yes sir.
- Q. Did you ever endeavor to interest capital in that?
 - A. No sir.
- Q. Did you locate any claims in that large area east of this first location in Section 32?
- A. There was one section, I think, or two east of that.
 - Q. Any north?
- A. Yes; I think there was four sections in that first group. Five, or maybe four. I can't determine just now without going right to the map. I haven't any notes. It would be hard for me to determine.
- Q. You say you have no notes in your possession showing where you were?
 - A. No; not now.
- Q. Did you have anything to do personally with the preparation of any location notices?
 - A. I don't remember.
 - Q. Or the recording of any?
- A. The recording of them and so forth. I don't know whether I wrote the notices on those claims or not.
- Q. Had you located any claims in other territory about that time?
 - A. Yes sir. [74]

- Q. Where?
- A. I was in with the McKittrick Oil Company that located three sections at McKittrick, and also some land in the Midway and some in Temblor.
- Q. Did any of them turn out a profitable venture in the way of production of oil while you were interested?
 - A. Yes.
 - Q. Where was that?
- A. The McKittrick Oil Company had about three wells. Three wells, I think.
- Q. Did you get outside capital interested in that property?
 - A. Yes sir.
 - Q. And developed it?
 - A. Yes sir.
- Q. You say there is no vegetation in the Elk Hills outside of sage brush?
 - A. Sometimes there is a little.
 - Q. Were you ever there in the spring of the year?
 - A. Yes sir.
 - Q. Is there any grass there?
- A. Sometimes, if it is a good year, there is grass there. If it is a bad year there isn't any.
- Q. If there is rain in the winter or spring there is grass?
- A. Pretty heavy rain. If it is a dry year there is nothing in the oil fields anywheres. In a good year all that territory in McKittrick is good feed.
- Q. Have you ever seen any sheep grazing in any portion of the Elk Hills?

- A. Yes sir.
- Q. When did you see them there? [75]
- A. Most all times that I have been there there has been sheep in that district. You would see them all along the mountains.
 - Q. That is, it furnishes a spring range for sheep?
 - A. Yes; when they don't require water.
- Q. And later on they move to the higher mountains?
 - A. Yes sir.
- Q. That is the general practice of handling sheep everywhere?
 - A. I believe so.
- Q. Mr. Wagy, do you remember anything about the kind of location notices you used when you first got them?
- A. I think we had that Bakersfield Echo print the notices from a copy of Bancroft's Forms.
- Q. Didn't you print a great many of them with the names of the locators printed with the rest of the notice?
 - A. No, I don't think I did.
- Q. Of course, that is some tome ago. Isn't it possible that that is what was done?
- A. There might have been others interested with me added notices printed that way.
- Q. And your name might have appeared that way?
 - A. Yes sir.
- Q. Isn't is possible that a large number of notices were printed in this way for the purpose of plaster-

ing them on considerable territory during the excitement?

A. Well, it would expedite matters, yes.

Mr. Lewers-That is all. [76]

DIRECT EXAMINATION OF M. S. WAGY.

By Mr. Mills:

- Q. You heard Mr. Drouillard's testimony the first morning?
 - A. Yes sir.
- Q. Was he interested in the same set of locations that you were when you first went in there?
 - A. Yes sir.
- Q. Were the only locations he was interested in to your knowledge in the Elk Hills?
 - A. Yes sir.
- Q. You say that part of your locations were in 30-23?
 - A. Yes sir.
 - Q. How many sections were in 30-23?
 - A. I don't remember now.
- Q. Did they join on to the locations you made in 30-24?
 - A. Yes. Our land was all in one bunch.
 - Q. And the township line divided them?
 - A. Yes sir. It went through the land.

Mr. Mills-That is all.

RECROSS EXAMINATION OF M. S. WAGY.

By Mr. Lewers:

Q. How did you know—that is, how is it that you fixed it in your mind that you had any of your locations in Township 30-23?

A. In running it out I could remember the township and range very readily through that whole country in many instances [77] where I could name the sections.

Q. Isn't it possible that you made an error in the number of the range?

A. In that township? No sir.

Q. You don't think it is possible?

A. No, unless the land has moved since I went on it.

Q. Suppose the land remained exactly as it was except for the natural process of erosion. Wasn't it possible that in going in there you inadvertantly put the wrong range number on?

A. No. We had two ways of proving that work, and I done that. I proved it from the east and from the west, and I could get a starting point at McKittrick for 30-22. I knew that township corner. And we proved it in that way. And in selling that I had to prove it, and I proved the territory out from both ends.

Q. What township corner did you start from?

A. 30-24 on the east and 30-22 on the west.

Q. Was that anywhere near the Headquarters Ranch?

A. 30-24 was.

Q. How far from the Headquarters Ranch?

A. My recollection is the corner is not very far from there.

Q. Which corner of the township was that?

A. The northeast.

- Q. You say "not very far." Can you be a little more specific as to how far it was approximately from the ranch?
- A. Well, it might have been a mile and a half or two miles.
 - Q. In which direction?
- A. From the ranch? Nearly south. South or a little east of south.
 - Q. That is the corner you started from?
 - A. Yes sir.
- Q. And you have quite a distinct recollection of that starting point? [78]
- A. We had to get that off of the plat-book and we had to get Miller's foreman, a man named Brown, to locate us on the starting point.
 - Q. He was the foreman of the Miller & Lux ranch?
 - A. Yes sir.
 - Q. He took you down to that corner?
 - A. He said that was the corner.
 - Q. And that was what corner of the township?
 - A. The northeast.
- Q. And you took the corner that he pointed out? How was that corner marked?
- A. It was marked by a post, and then charcoal in the ground.
 - Q. What were the markings on the post?
 - A. I don't remember now.
 - Q. Do you remember seeing any at all?
- A. Yes; I think there were. Most all of the posts were marked.
 - Q. Can you remember as you think back what

those markings were? It is quite important that we should know.

- A. I can't tell you.
- Q. And you yourself personally went to that corner with the foreman of the ranch, did you?
- A. Yes; we went to it, and the boys went to it and started from there.
- Q. In what direction, again, was it from the ranch?
- A. My recollection is that it was south and a little east of south.
 - Q. That was the northeast corner?
 - A. Yes sir.

Mr. Lewers-That is all. [79]

REDIRECT EXAMINATION

OF

M. S. WAGY.

By Mr. Mills:

- Q. Which ranch was that?
- A. What was known as the Headquarters Ranch. I don't know what they call it.
- Q. Just step over here to the map a minute. They had three ranches. Here is 30-24; here is 30-23; here is Buttonwillow.
- A. Headquarters Ranch ought to be here somewhere.
 - Q. How far was it from the railroad?
- A. Headquarters Ranch was six or seven miles South.
- Q. Here is the township corner over here. Do you mean the Miller & Lux ranch was south or that

the corner was south of the Miller & Lux ranch?

Mr. Lewers—I object to that manner of leading and suggestive questions.

A. I don't remember how that is exactly, but we went from that ranch to that corner.

Which corner? Was it this corner that you went to or this corner?

- A. This is north?
- Q. This is north. Here is the seep you spoke of in 32. You said some of the lands joined on that, in 30-23.
- A. That is my recollection of it, going in that direction.
- Q. You see where the Miller & Lux ranch is? It would be about Section 15?
 - A. Yes sir.
- Q. And the northeast corner is about two miles or two miles and a half from there—
 - A. I have lost track of it. [80]
 - Q. You want to correct that testimony, do you?
 - A. Yes sir.
- Q. Are you satisfied, however, that the township line between 30-23 and 30-24 ran through the locations that you made?
 - A. Yes sir.
 - Q. You are positive of that?
 - A. Yes sir.
- Q. So that a portion of the locations were in 30-23?
 - A. Yes sir.
 - Q. You found a blow-out in 26 of 30-23?

- A. Yes; there was indications there.
- Q. Did you locate on that land?
- A. No; that was located.
- Q. Did you locate on any sections adjoining it?
- A. No.
- Q. You found a seep of 32 of 30-24?
- A. Yes.
- Q. Did you find one in 26?
- A. There was a disturbance there in 26 of sand or shale broken up that we were over.
 - Q. In 30-23?
- A. Yes, but I don't have any recollection of locating that land.
- Q. You did locate in 30-23 adjoining to the west the locations in 30-24?
 - A. Yes sir.

RECROSS EXAMINATION

OF

M. S. WAGY.

By Mr. Lewers:

- Q. Did you locate any land adjoining Section 26 in Township 30-23 ? [81]
- A. We located land around in there. I could tell you if I went to the records where the locations are, if you want me to do that.
- Q. You say you recoilect finding some indications of oil sand in 26. Did you make any locations in that vicinity?
 - A. I don't think so.
- Q. How far from that was your nearest location, according to the best of your recollection at time?

A. Mr. Mills-You had better step to the map.

Mr. Lewers—No, if you please. Will you kindly read the question?

Mr. Mills—Any time you want to refresh your recollection from this map, you can do so. That is your right.

A. I don't remember now.

Q. By Mr. Lewers—Well, approximately. I am asking you to look back as near as you can and form a picture in your mind of the ground and your knowledge of the territory and state to me as near as you can how far from this indication in Section 26 that you have referred to your nearest location was.

A. There would be no use of my swearing to anything like that. I can get the records and show what it was at that time.

Q. I want your nearest recollection from your knowledge of the ground?

A. I haven't much recollection about it at the present time.

Q. Did you locate any other corner of Township 30-24 besides the northeast corner?

A. Not that I remember of.

Q. And did you endeavor to check that corner by the corner of any other township?

A. We checked a corner on 30-22. That would be the corner of 30-23 also. [82]

Q. Did you run a line across to get the two corners?

A. Oh yes.

- Q. And did that line run north or south of the Miller & Lux ranch?
 - A. Which line have you reference to?
- Q. The line that you ran across to get the two township corners that you found.
- A. It would not be in the neighborhood of the Miller & Lux ranch between 30-22. In 30-23 it would be—
- Q. I misunderstood you. I thought you went over to the corner that you have referred to in 30-24?
 - A. No sir.
 - Q. You never connected that?
 - A. No sir.
- Q. Your recollection is, I understand it, as I understood your testimony before that, that you found the corner that was pointed out to you to the south or southeast of the Miller & Lux ranch?
- A. That was my recollection of it at that time. I see it is wrong according to that map.
- Q. That is, according to the map. But your recollection independent of the map is that you went southeast?
- A. That was my recollection. But that was sometime ago when that occurred.
- Q. And you didn't prepare this map Exhibit I, did you, yourself?
 - A. No sir.
 - Q. And had nothing to do with its preparation?
 - A. I don't think I did.
 - Q. And that map means nothing to you so far as

reviving your recollection as to anything you ever did?

- A. No; that map is rather confusing to me, while it may [83] be correct in every way. In looking at it I become confused instead of enlightened.
- Q. But you do have a mental picture, do you not, of being at Miller & Lux ranch and of going to a certain corner?
 - A. Yes sir. We had to do that.
- Q. And going there with the foreman of the ranch?
 - A. Yes sir.
- Q. And your recollection before you examined the map and became confused by what appears on it was that you went to the south or southeast?
 - A. That was my recollection of the matter.
- Q. And independent of that map that is still your recollection, is it not?
- A. Yes; that is the way it is impressed on my memory.

Mr. Lewers-That is all.

Whereupon the further taking of testimony herein was adjourned until Thursday, April 18, 1912, at 10 o'clock A. M., at the same place. [84]

HENRY M. THOMPSON, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I reside in McKittrick, Kern County, and am a bookkeeper by occupation. I was employed by J. B. Treadwell in the Kern River Field, from 1899 to the spring of 1901, and from 1901 to/902 at McKittrick.

I was employed by Mr. Treadwell as the representative of the Southern Pacific Company's Oil Department. My duties consisted of keeping the books of all the accounts, the time and oil reports. My employment did not cover anything except the transactions of the Oil Department of that company. I had nothing to do with the freight business or the passenger business of that Company. When I first went to the Field they were just starting the oil busness and I was helping over the lease in all kinds of different work until we got started and then I commenced keeping the books. I went out on the 28th of September, 1899, I think it was. They were just starting into the field and had no buildings and I assisted in any manner I could until the offices were built. I know F. J. Sarnow and I. M. Anderson, the two gentlemen who testified yesterday. The names of both of those gentlemen appeared on the books of the Company. F. J. Sarnow's name appeared as foreman of the McKittrick lease-the Southern Pacific Company's lease at McKittrick. He was foreman during those times, while I was at the Kern River Field as well as at the other place. Mr. Anderson occupied the position of driller in the McKittrick Field under F. J. Sarnow. Mr. Treadwell was manager of the Oil Department, so he informed me. Mr. Treadwell took supervision over the entire field. He gave orders as to what drilling was to be done, and what supplies were to be bought. He never paid any attention to the hiring of the men; that was left to the foreman. The foreman of the Kern River lease was [85]

L. G. Sarnow, the party who testified in this case. The foreman on the other lease was F. J. Sarnow. While I was bookkeeper, oil was produced both in the Kern River and the McKittrick Fields. The oil was shipped in cars over the Southern Pacific Co.'s Railroad. I can't say for what purpose the oil was used, but the engines loaded at McKittrick and they always filled their tanks at the Kern River Field from the oil that was produced on leases or oil that was purchased. None of the oil produced on these leases was ever sold to any other concern other than the concern operating the Southern Pacific Railroad. My books show no receipts. Everything was expenditures. The expenditures covered the employes of the lease, that is, the drillers, tool dressers, roustabouts, teamsters and other men employed on the lease. freight charge was paid for shipments of oil. supplies, that is, the tools and implements, were obtained in the following manner. Small bills of goods at first were ordered by J. B. Treadwell from whomever he wished to buy. Afterwards we were ordered to purchase through the purchase and supply department of the Southern Pacific at San Francisco. R. P. Schwerin was at the head of that Department. I always sent vouchers for all bills that came in and sent a report each and every month of the term accounts and also of the oil shipped. If I am not mistaken, those reports were sent to the purchase and supply department, of which Mr. Schwerin was the head. While I was in that employment, I had occasion to travel on the Southern Pacific Railroad. I

204

had what was called a rate ticket, that is, a reduced fare of one cent a mile. I applied to Mr. Treadwell for the rate ticket and he gave me an order to Mr. Burkhalter, the Division Superintendent of the S. P. at Bakersfield. His office was at East Bakersfield. The other employes of the oil department travelled some on passes and some on rate tickets. It depended entirely on what business they were on. If they were on business of the Oil Department, [86] they travelled on pass over the railroad lines of the Southern Pacific Railroad. In other words, so far as the privilege of transportation was concerned, the employes of the Oil Department were treated the same as employes of the operating department of the railroad while traveling. As stated by Mr. Anderson and Mr. Sarnow, I deducted fifty cents a month from each employe of the Oil Department while I was keeping the books there. I don't know what was done with that fund. My books merely showed that it was taken from the payroll. The funds with which the expenses of the Oil Department were paid came from San Francisco from the Treasurer of the Southern Pacific Company. Sometimes Mr. Treadwell would order money to be sent to Bakersfield, to the bank of Bakersfield, where we kept our deposit. Sometimes he would write letters. Sometimes he would mention the fact that he was short of funds while some of the head men were down in the field from whom he could order money. Over in McKittrick they had more than one place from which they obtained oil. There was the south end lease, as it is

known out there,-the S. P. south end lease, and the S. P. north end lease-about a distance of three miles apart. My impression is that a portion of the south end lease was on Section 20 and a portion of it on Section 29, in Township 30 South, Range 22 East. I don't know what section the north end lease was on at McKittrick. During the time I was in the Kern River Field, Mr. Treadwell's headquarters in the field were at the office. He was not there all the time. Sometimes he was in Texas and then in San Francisco and down there quite often. When he was out there he went out every day in his buggy in one direction or another. Mr. Treadwell would lease lands. would put the price on lands, that were supposed to be oil lands; a price on all of it or the royalties, if it was leased, with a bonus, if there should be one. He had charge [87] of that for the Land Department of the Southern Pacific. Mr. Jerome Madden was head of the Land Department of the S. P. If there was an application placed with the Land Department for a lease or purchase of certain pieces of land that were presumed to be oil land, it was referred to Mr. Treadwell by Jerome Madden or the Land Department. Applications were sent to Treadwell on which he placed a price per acre of this land and also placed the amount of royalty, the number of wells that were to be drilled during a certain period of time, and what bonus, if any, was required. Mr. Treadwell placed that on these applications and returned them to the Land Department. All I had to do with regard to these actions of Mr. Treadwell was writing the cor206

respondence in regard to it. If Mr. Treadwell was not in the field at the time, he quite frequently left with certain sections and certain portions of sections-he would leave orders with me what bonus, what price per acre, what royalty was required, and should an application come in during his absence I could fill out the application and return it to the Land Department. I did it, I believe, on one or two occasions. There were quite a number of applications received by Mr. Treadwell; I should say fully fifty, while I was in the Kern River Field, and each one of those took the course that I have indicated. They came first to Mr. Treadwell from the Land Department, of which Mr. Jerome Madden was manager, and they were referred to Mr. Treadwell, and he would make his notations as to what should be obtained, or the provisions that were to be put in the lease; and when that was done they were to be sent back with his recommendation to the same Land Department. This was all done by correspondence. The correspondence would be placed in envelopes marked "railroad business" on them and we would take these to the train and the trainmen would carry our mail. We had a quite a number of maps of different sections of the country and if there was no record of a particular [88] piece on the map, Mr. Treadwell would make an investigation. This was the way in which he got his data from which he made these recommendations that were forwarded to Mr. Madden. He had quite a number of maps and they covered the whole oil region in Kern County in general. They were kept in

his office at Kern River. He had maps of townships; then he had section maps; quite a number of those just of the section. The maps were inked off at different sections stating just what was on that certain piece of land, and there were other data at the bottom in writing stating what the different marks on the maps meant. These maps were annotated. I didn't see any agricultural qualifications or characteristics noted on the maps at all. Mr. Treadwell had nothing to do with the agricultural features of the land. His business was only with the oil land. The name of Charles W. Eberlein is very familiar to me and I believe he was with the Land Department. I think there was correspondence that passed between the offices with his name signed to it, but I can't be positive as to that. That is the same Land Department of which Jerome Madden was at the head. Some of these applications were for the purchase of lands outright and some for leasing. The applications read for purchase or lease or both. None of the leases I referred to were executed by Treadwell, to my knowledge. That was done in San Francisco at the Land Department. The lands to which these applications referred were the railroad lands, the odd-numbered sections. Mr. Treadwell's approval of the application for the purchase or lease was required before the Land Department would execute such purchase or lease. It was absolutely left to him. I remember one letter written by Mr. Treadwell to the Land Department recommending withdrawal of certain sections that he thought were

good oil lands, that they could use themselves, but what those sections were I cannot name. That was all in the Kern River Field. By "themselves" I mean the Southern Pacific. Mr. [89] Treadwell was engaged in no other business that I know of other than in the oil business in a representative capacity for the Southern Pacific Company or the Railroad Company. He confined his time exclusively to the oil business of the S. P. Company. I have heard Mr. Treadwell speak of Mr. Eberlein as he would speak of most every one of the men connected with the different offices. No charge was made on the books for oil that was used by the railroad in the operation of locomotives or anything of that kind. There was just a report of the amount of oil that was shipped, the number of cars and the number of barrels to each car. This report was sent to the San Francisco office. I know Mr. H. E. Huntington and Mr. Kruttschnitt and Mr. Hayes and Mr. Hood. H. E. Huntington was president of the road; Kruttschnitt was the General Manager; Charles M. Hayes was President after Mr. Huntington, and Mr. Hood was the Chief Engi-I have seen Mr. Kruttschnitt at the Kern River Field two or three times and Mr. Huntington only once, to my knowledge. I never saw any of these men at McKittrick. Mr. Treadwell drove these men around over the S. P. lease and then drove them over the lease nearby on one occasion that I remember of. They went to the Thirty-Three and Imperial to examine the pumping station that the S. P. had on that lease. They went on a tour of inspection, but all

these gentlemen were not there at one time. I know Mr. Bienenfeld. He was a surveyor for the S. P. I met him in the Kern River Field and at McKittrick and Bakersfield. When I met him he was a surveyor for the S. P. He and Mr. Burkhalter purchased a piece of land from Mr. Treadwell, or leased it, and with a bonus of \$1250, if I am not mistaken. That was one of the applications made to the Land Department and referred to Treadwell. I knew Josiah Owen and E. T. Dumble, the geologist, by sight. I saw them around McKittrick prior to 1904. They were out driving in the Southern Pacific buggy. I don't know what they were doing. I don't think I ever [90] saw them both at one time in the same buggy, but I have seen them each in that buggy at different times. I would see them going in most all directions, driving through McKittrick, first one way and then another, north, east, south and west. I don't know in what capacity they were employed. I have seen them come down off the hills from the Southern Pacific lease. Dr. Schaefer was the Southern Pacific physician and surgeon in that locality at that time.

CROSS-EXAMINATION OF HENRY M. THOMPSON.

By Mr. Lewers:

- Q. I understand, Mr. Thompson, that you were employed both at the Kern fields and at the McKittrick?
 - A. Yes sir.
- Q. Did you change back from one place to the other from time to time, or did you spend quite a

considerable period at one place and then go to the other?

A. No, I would go about the first of the month or anywhere from the first to the fifth to McKittrick and spend two days, sometimes, and a little longer. At that time we only had two trains a week from Bakersfield to McKittrick. I had to go out on one train and come back the next, which was two or three days later, and take care of the books out there and then come back to Kern River, and remain there the balance of the month. Before that Mr. Sarnow used to send in the reports to the Kern River office—all bills, all time sheets, all oil reports, were sent in to me and I made out the same at the Kern River office and forwarded it to San Francisco to the San Francisco office.

Q. Up to what time did this practice that you have mentioned continue? [91]

A. I think about six months before I went to Mc-Kittrick.

Q. In what year was that?

A. That was in 1900.

Q. Do you mean that Mr. Sarnow sent there reports up to 1900?

A. Well, it was later than that. It was in possibly the fall of 1900 before I commenced going to McKittrick every month.

Q. Then after that you kept the books at McKittrick yourself?

A. Yes sir; I kept the books at McKittrick. I would go out the first of each month and look them

over, at least, and I would take the time sheets and send my reports to the office.

- Q. You would be in McKittrick two days each month?
 - A. Yes sir.
- Q. And the balance of the time you were in the Kern field?
 - A. Yes sir.
- Q. How far was the lease in the Kern fields from the lease at McKittrick, approximately?
 - A. How far from the Kern River to McKittrick?
 - Q. Yes sir?
 - A. Fifty-four miles.
- Q. How many leases did the Southern Pacific Company have at McKittrick during the time you were employed as bookkeeper?
- A. When I first went to McKittrick, one only. The second one was established soon after I went to McKittrick.
- Q. That is what was known as the North-end lease?
 - A. Yes sir.
 - Q. You had a South-end lease first?
 - A. The South-end lease first.
- Q. Do you remember on what sections those leases were?
- A. It is my impression that it was on a portion of 20 and [92] a few derricks were over on 29, if I am not mistaken.
- Q. From whom did the Southern Pacific lease that ground, if you know?

A. I can't say who the Southern Pacific leased from.

Q. Didn't you have any information as to who the landlord was?

A. That was not in my department at all—the leasing.

Q. Do you know whether it was leased from any oil company?

A. I can't say.

Q. Did you ever hear anything about the Buena Vista Oil Company?

A. I have.

Q. Do you know whether the Buena Vista Oil Company held a lease on that same ground?

A. I have heard that they did.

Q. Did you hear that at the time?

A. I don't know whether it was that time or not, or since.

Q. Didn't you hear at that time who owned the ground?

A. I heard that Treadwell owned the ground.

Q. Individually?

A. No; holding it for the Southern Pacific, as the rest of the land that was in Treadwell's name.

Q. Was the lease in Treadwell's name?

A. No; I can't tell you that.

Q. Did you ever hear of Treadwell giving a lease to the Southern Pacific Company?

A. I never did. I never heard of any land being in Treadwell's name, but I knew it was in Treadwell's name from—the Southern Pacific land.

- Q. Was this lease known as the Southern Pacific South-end lease at McKittrick in Treadwell's name?
 - A. I can't say positively; no. [93]
- Q. Was the land on which the lease was in Treadwell's name?
- A. Not that I know of. I can't say. It may have been and may not. I paid no attention to any leases. That was not in my line.
- Q. Did you pay any attention to the ascertainment of the character of any of that land yourself?
 - A. No sir; not personally.
 - Q. You had nothing to do with it?
- A. I had nothing to do with leasing the land at all. That was not in my department.
- Q. On what sections were the leases in the Kern fields \hat{r}
 - A. On Section 3.
 - Q. All on one section?
 - A. Yes; all on one section.
- Q. From whom did the Southern Pacific lease that land?
- A. That came from the government, according to my understanding. Section 3 is an odd section.
 - Q. They had to lease from the government?
- A. I understand it was a patent from the government.
 - Q. To the Southern Pacific Company?
- A. I don't know whether it was the Southern Pacific Company or the Southern Pacific Railroad.
- Q. The question is from whom did the Southern Pacific Company hold its lease.

A. That I can't say. I never saw the lease, nor did I have any means of finding out.

Q. Did you ever hear who the landlord was?

A. I have heard that it belonged to the Southern Pacific Railroad Company.

Q. That is Section 3 in the Kern field?

A. Yes sir. [94]

Q. You didn't hear that Section 20 at McKittrick belonged to the railroad company?

A. No sir; I didn't hear anything about that.

Q. Did you carry any account of royalty or rentals paid on the lease at McKittrick?

A. I never carried royalties on my books—money paid to anyone for any sections.

Q. Do you know whether any such accounts were kept anywhere else?

A. I can't say. I don't know.

Q. Isn't it a fact that your books were merely for the local expenditures in carrying on the actual oil work?

A. That was all that I claimed that they were for.

Q. Your books covered merely local expenditure? Is that correct?

A. Yes; my books only carried the local expenditures. That is, for payments and for employees. I believe I kept that. That is about the only thing they had to show. The oil that was produced there I kept no record of that on my books, for the simple reason that the report was made to send to the San Francisco office on the first of each and every month.

Q. Report of what?

A. Report of oil shipped to the Southern Pacific Company—Southern Pacific Railroad Company.

Q. To the Southern Pacific Railroad Company?

A. It was delivered to the Southern Pacific Railroad Company. I had standing orders to deliver oil to the West Oakland yards every Tuesday and Thursday, one car each day, to Mr. — I can't call the gentleman's name now—he was superintendent there for a time of that division. They were billed to him.

Q. Do you mean to say that these shipments were made by the Southern Pacific Company to the South-

ern Pacific Railroad [95] Company?

A. In this way: They were shipped to the superintendent of the Southern Pacific Railroad Company.

Q. Who was superintendent of the Southern Pacific Railroad Company at any point during your employment?

A. At the West Oakland yard—I don't remember who it is now that it was shipped to, but that order came from Mr. R. P. Schwerin by telegram "Ship to West Oakland yard," name of the party, and he was the superintendent, if I am not very mistaken, of that division,—"Ship on Tuesdays and Wednesdays one car of oil, without fail."

Q. Then from what do you draw your conclusion that this man was superintendent of the Southern Pacific Railroad Company as distinguished from the Southern Pacific Company?

A. I didn't know that there was a difference between them.

Q. That is what I am coming at. Then you were

not aware at that time that there was a distinction between Southern Pacific Railroad Company and the Southern Pacific Company?

A. No sir; I always considered that it was the Southern Pacific Railroad Company that owned the oil. I never have been able to get it through my head, while I was with Mr. Treadwell, why there was a difference between Southern Pacific Company and Southern Pacific Railroad Company.

Q. Then you never have understood that there was a distinction between the two?

A. I knew there was a distinction, but I couldn't see the difference.

Q. Well, it must have seemed to you peculiar that the Southern Pacific Company made a lease in Kern fields on its own lands?

A. Mr. Treadwell spoke of it as the Southern Pacific Company. [951/2]

Q. Were you not aware at that time that the Southern Pacific Railroad Company was the original company to whom the land grant was given, and that the Southern Pacific Company was a later company operating not only the lines originally owned by the Southern Pacific Railroad Company, but the lines of the Central Pacific Railroad Company and other lines?

A. No sir: I did not.

Q. Now, having that in mind, can you now state whether you had any information or data in your possession with reference to the lease in the Kern field showing that it was leased by the Southern Pacific Railroad Company to the Southern Pacific Company?

- A. No sir. I have no data of that kind.
- Q. Did you ever hear anything about that?
- A. I never heard.
- Q. Then, at the time when you were acting as bookkeeper you never had in mind the relations between these companies? Is that correct?
- A. I only had it Southern Pacific Company. That was told me by J. B. Treadwell. But I didn't know there was a difference, and it was quite awhile after that before I ever knew that there was really a difference between Southern Pacific Company and Southern Pacific Railroad Company.
- Q. At that time you were not aware of the difference?
- A. I was not aware, as orders would come from the purchase and supply department of the Southern Pacific Railroad. Of course the impression was that it was all billed to them. I was working for them and I applied to them for passes.
- Q. You handled a great deal of correspondence while you were acting as bookkeeper, did you not?
 - A. Yes sir.
- Q. I show you government's Exhibit I and ask you to [96] examine that carefully, particularly the printed matter on that envelope, and state whether or not the stationery you used was similarly marked.
 - A. Yes sir. I think it is the same thing.
 - Q. That is "Southern Pacific Company"?
 - A. Yes sir.

- Q. And it was your understanding, was it not, Mr. Thompson, at the time when you were there as book-keeper that the oil that was being produced from those leases was being used in the operation of engines on the lines of the road?
 - A. The Southern Pacific Railroad; yes sir.
- Q. That is, whatever company was operating the lines was using the oil? That is your understanding?
 - A. How is that?
- Q. That is, whatever company it was that was operating the lines and running the trains was using the oil?
 - A. Yes sir.
- Q. And you did not differentiate in your own mind at that time whether it was the Southern Pacific Railroad Company or the Southern Pacific Company that was operating the line?
- A. I always supposed it was the Southern Pacific Railroad Company that was operating it, though it was called the Southern Pacific Company.
- Q. That is, you understood it was called the Southern Pacific Company?
- A. It was called the Southern Pacific Company; yes sir.
 - Q. And the stationery you used was marked-
 - A. "Southern Pacific Company".
- Q. You understood, did you not, that Mr. H. E. Huntington was president of the Southern Pacific Company?
 - A. Of the Southern Pacific Railroad Company.
 - Q. From where did you get your information that

he was [97] ever connected in any way, shape or form with the Southern Pacific Railroad Company?

A. I don't know. It was always understood that Mr. H. E. Huntington was president of the Southern Pacific Railroad Company.

Q. Who did you understand was the president of the Southern Pacific Company?

A. Mr. H. E. Huntington. I thought it was one and the same thing.

Q. You didn't know the difference?

A. I didn't know the difference. I didn't know that there was a difference that you speak of.

Q. Do you know who is the president of the Southern Pacific Railroad Company now?

A. Mr. Sproule.

Q. And who is the president of the Southern Pacific Company?

A. I think Mr. Sproule is too.

Q. He undoubtedly is of the latter company.

A. Then he would be president of both companies.

Q. No, that doesn't follow. That is not the fact.

Mr. McCormick-Literally not; in reality, yes.

Mr. Lewers—Literally not and in reality not. And you say that occasionally—well, frequently—I believe you said—as many as fifty times or more communications came to Mr. Treadwell while you were acting as bookkeeper, from Mr. Madden or the land department of the company with reference to applications that had been made to lease or purchase or to lease and purchase. Is that the fact?

A. That is the fact; yes sir.

- Q. And when any such application was referred to Mr. Treadwell, you say that he made a report on that application as to [98] whether or not it covered any land that might be valuable for oil for the company?
 - A. Invariably he did; yes sir.
- Q. And the only instances you know where he did make such reports concerning sales of lands or leases, were instances where he received a communication from the land department and reported on it? Is that correct?
 - A. Yes sir.
- Q. Do you know of his making any reports or examinations of the land as to its oil character or as to its containing gold or silver or any minerals except in connection with such applications?
 - A. Do I know of his making an investigation?
 - Q. For the company.
 - A. For the company?
 - Q. Yes sir.
 - A. Not to my knowledge.
- Q. Have you ever known of his making any investigation of the character of any land with respect to applying for a patent for that land?
- A. No; I don't think I ever knew of his making an investigation of that. Not to my knowledge, although he was out constantly investigating land. I don't know for what purpose.
- Q. Isn't it a fact that Mr. Treadwell had interested himself in various oil properties individually on even sections and elsewhere?

- A. Not to my knowledge.
- Q. You never knew of his interesting himself individually?
 - A. I don't know of any personal interest he had.
- Q. He was looking out for the development of oil to run the engines of the road?
- A. He was looking out for the development of oil for the [99] Southern Pacific.
- Q. That is, he was looking after what you might call the development, industrially, of those oil properties that the company might own or lease? Isn't that the fact?
- A. Well, yes; he was. And he also—I have heard him say—he was always looking out for any oil lands that the Southern Pacific owned that could in the future be turned to their use by being developed.
- Q. That is, at that time, it is a fact to your knowledge, Mr. Thompson, is it not, that the company had begun to seriously consider using oil on its entire system for fuel?
 - A. Yes sir; about that time.
- Q. And Mr. Treadwell was engaged in an effort to develop sufficient oil for that purpose, was he not?
 - A. Yes, I presume he was.
- Q. That is, to your knowledge he reported to the operating officials of the company, did he not?
- A. Well, he was there to attend to all the oil business, and produce all he could.
- Q. Perhaps you do not understand my quetsion. Did he not report to Mr. Kruttschnitt?

- A. Yes sir; he constantly reported to Mr. Kruttschnitt.
- Q. And Mr. Kruttschnitt was in charge of the operating of the road?
 - A. Yes sir; general manager.
- Q. Now, you say that these communications that you have referred to with reference to the land being leased or sold, were sent from the San Francisco office to Mr. Treadwell?
 - A. Yes sir.
- Q. Were all of those that you are familiar with sent by Mr. Jerome Madden?
 - A. Not in person. [100]
 - Q. Or from his office?
- A. His office—oh, there was frequently letters from Mr. Kruttschnitt in regard to the oil business.
- Q. I am speaking specifically with reference to the leasing of other individuals.
 - A. Well, from Mr. Madden's office.
- Q. Do you know when Mr. Madden severed his connection with that office?
- A. No, but it was after I left the S. P. He was still with that office, I think, when I left.
 - Q. And you left when?
 - A. In 1902.
- Q. And were you familiar with what was done in connection with any of the oil lands of the company or any leases held by the Southern Pacific Company after the time you left its employ?
- A. Do I know what was done with the leases after I left ?

- Q. Yes.
- A. Absolutely nothing.
- Q. Then your testimony does not go beyond the period of 1902?
- A. I will retract that. I can't be positive whether it was 1902 or early in 1903. After that I know nothing about their transactions in the oil department or any other transactions of the railroad.

Mr. Lewers-That is all.

REDIRECT EXAMINATION

OF

HENRY M. THOMPSON.

By Mr. McCormick:

- Q. Were these transactions about which you have testified relating to the applications for lease or purchase of these [101] lands on odd-numbered sections, in any way entered upon the books of the oil department which you kept at Kern River or McKittrick?
 - A. No sir; I had nothing to do with that.
- Q. By Mr. Lewers—There is one other question that I over-looked. You were asked, Mr. Thompson, about a surveyor in the employment of the Southern Pacific Company by the name of Bienenfeld.
 - A. Yes sir.
- Q. You say he and Mr. Burkhalter leased a piece of land. Do you remember where that was?

I think it is right in where the Standard Oil Company have their "tank city" now.

- Q. It is in the Kern River field?
- A. No sir.
- Q. It was not anywhere near the Elk Hills?

- A. Oh, my, no. Fifty miles from the Elk Hills.
- Q. By Mr. McCormick—With reference to these car-loads of oil that were shipped to the Oakland yards and other places of that kind that you have testified to, you don't know what use they put those to?
 - A. No sir.
- Q. You don't know whether they sold them or used them in their engines or what they did?
- A. I have no knowledge of what they did with them at all. [102]
- B. K. LEE, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am engaged in the oil business at McKittrick. where I have lived since September, 1900. I have been engaged in that business ever since that time continuously. I was sent to McKittrick by the Belmont Oil Company to take charge of their property at McKittrick. I am familiar with oil lands in the vicinity of McKittrick. I have had no oil experience outside of California. I know what an oil outcrop is, or sand outcrop, or seepage of asphaltum. While I was in that country I observed oil sands, outcrops and seepages. The nearest seepage to the property that I was in charge of was a tar spring on the southwest quarter, Section 12, Township 30 South, Range 21 East. I also observed on Section 13 of the same township, dry oil sand and asphaltum. Section 18, 30-22, outcroppings of sand -dry. And Section 18, 30-22. On Section 17 there was an outcropping. On Section 20, Section 29, Sec-

tion 28, Section 34, Section 35, of the same township, 30-22. On Section 2, 31-23, there was an oil seepage. On Section 21, 32-23, an outcropping of oil sand. Section 22, an outcropping of oil sand, in the same township and range, 32-23. Section 26, 32-23, on that line. I am also familiar with the oil sand cropping on Section 18, 29-21. In Section 35, 29-21; Section 36, 29-21, Section 8, 30-22. These are all dry oil sands. And Section 14, 30-22, an outcropping of sand. That is all I know of the outcropping of sand in that immediate vicinity. I observed these outcroppings shortly after I went to McKittrick. In November or December, 1900, I examined the strike of the outcroppings to the south and east from McKittrick beginning in 30-21, 30-22, and dropping down into 31-23, over into Township 32-23, because it had a bearing on some lands that my people owned. [103]

I made a personal examiantion. Some of those outcroppings are on the line of contact with the Temblor Range in the McKittrick formation. I am acquainted with what is known as the Elk Hills. There is a large group of hills lying north of what are known as the Buena Vista Hills. The trend of those hills is almost east and west, a little southeast and a little northwest. Their elevation is about 1500 feet at the point where I took the elevation; that is, on the crest of the hill. I don't know that it is the highest place, but it is along the line of the crest of hills. The crest of the hills runs a little northwest and southeast. I travelled about seven miles in those hills. I should judge that it would be about twelve

miles from the gap in the railroad crossing to Buena Vista Lake. I would estimate that the width of the group of hills from flank to flank, north and south, is about five miles. The surface is a sand, clay, some little shale shows. The general formation is rolling. In some places it is broken by gulches and the land is pretty steep in places. I went over the crest of the hills for seven miles. I went some where in the neighborhood of the southeast corner of Section 26, Township 30 South, Range 23 East, and went up to the southwest corner of Section 36, Township 30 South, Range 23 East, and examined some lands owned by Mr. Buffington on the east side of the Section. I found the township corner there. The reason I went into the hills was because Mr. F. J. Carman, with whom I was associated, wrote me from Bakersfield to go in there and make an examination. That was in the latter part of August, 1909; and he furnished me with a little topographical map to guide me, and said if I found conditions as represented, to report, and also to find out if I could follow out any anticline from there to the northwest. I had observed indications of an anticline towards the western end of the hills in Section 14, Township 30 South, Range 22 East. It is immediately along the railroad [104] track where there is a trestle. The railroad crosses the bed of a wash just to the east of the anticline. There is a natural wash or gulch or cut there where the railroad goes through. The anticline is a well defined fold about six to eight hundred feet across the top of it. It exposes gypsum, clay and sand of different char-

acters, and on the south side of the anticline, below to the south and west, the pitch would be about twenty-five degrees. On the north side it was much more precipitous, perhaps forty to forty-five degrees. first observed that anticline when I went into Mc-Kittrick on the train. The train was held up there and we had to stop every now and then to get up steam to make the balance of the distance and I was naturally curious and we walked the last mile into McKittrick that time and I had a chance to observe a few things. I saw the natural fold from the erosion. It is very plain. Its trend is northwest and southeast in the general course of the hills. That is the evidence on which I went in to Section 36, to follow up and determine whether that anticline extended into the hills. I wanted to know if there was an anticline there, and it was on the evidence that I observed when I first went into McKittrick in 1900 on the western end of the anticline that I went back into Section 36, Township 30 South, Range 23 East, for the purpose of determining whether it extended back into the hills. The hills are generally rolling. There is some erosion, but not greatly eroded as you would suppose from the surface formation-the sand and clay. I have observed other hills around the country in different places and these hills, from my observation, are at the present time in about the same condition as they were in 1900. There has been no change in the hills from the time I made the examination in 1900. Sometimes there is much rainfall there in the spring of the year. The climate is a good

228

deal of a desert nature; it is a hot climate and very little [105] rainfall. There is no water up in the Elk Hills that I know of. I can't say that I know of any water in Township 30 South, 23 East, or in the neighboring sections. I never saw any water in there and very little vegetation. What little vegetation there was consisted of sagebrush and some grass. sagebrush was sparse. The hills are rather barren. There is a short grass on the slopes in the spring of the year. In the hot season other than the sagebrush there is dry dead grass. The land on the crest of the hill, or on 30 South, 23 East, is not susceptible of agriculture and has value only for grazing. I don' think it has any value for raising crops. acquainted with Mr. Owen, the geologist. He worked for the S. P. Company in the capacity of a geologist. I saw him at McKittrick quite frequently in 1903 and 1904. In 1903 I had a talk with him about the anticlinal evidence in Section 14, Township 30 South, Range 22 East. In the spring of 1903 I went to Asphalto and while there Mr. Owen drove up and he asked me if I knew where the pits and shafts were that they got the asphalt from on Section 27. I said I did. He asked me if I would go with him and I did. That was not the first time I talked with him. this last conversation' I asked him if he came in from Section 24, in Township 30 South, Range 22 East. There is an old derrick up there. That is in the Elk Hills. I asked him if he had observed the anticline in Section 14. He told me he had and that it was a strong one. That is all the conversation we had in

reference to that anticline. The first time I saw him was early in 1903. He came to my camp. He asked me if my name was Lee and told me his name was Owen. He said he understood that I knew the corners of the country around there pretty well and would I show him the west quarter section line of Section 11, Township 30 South, Range 21 East. I told him he was a stranger to me and I had been troubled by "Scrippers" and "jumpers" and that I didn't [106] care to show anyone any corners unless I knew what business he had there. He told me he was in the Geological Department of the S. P., under Prof. Dumble, and he meant no harm to me whatever. I rode up and showed him the corner on top of the hill. After I made a report to Mr. Carman, referred to in my testimony, he bought 159 acres of the lands which I investigated in the Elk Hills. This was in Section 36, Township 30 South, Range 23 East. That purchase was made for mineral possibilities for oil. The formation of the Elk Hills which I examined in Township 30 South, Range 23 East, has more clays and sand exposed than the country immediately adjoining to the McKittrick Oil Fields. I recommended the purchase of this land for its oil value. Mr. Carman at this time was seeking land for the mineral and oil possibilities. I have met Mr. Dumble. I have seen him around McKittrick eight or ten times, perhaps. When I saw him he was driving in McKittrick, usually with Mr. Owen. He would drive between the town and the oil lease. When he was there he would stop with the Kern Trading &

Oil Company. He and Mr. Owen used the K. T. & O. Team. I had a conversation with Mr. Owen with reference to the Buena Vista Hills. He told me it. was a great gas country. He told me he had been around the hills, around the lake, that it was great gas country; that at different places he could put his bar into the ground and remove his bar and get a flash of light. He told me of one place in particular in Section 11, Township 32 South, Range 24 East. He mentioned that as the oil sand cropping. He said he had found evidence of gas in the hills in eleven different places. He said that he could put a crowbar in and withdraw it and could then get a flash by lighting a match. Section 11 is near the Honolulu Oil Company's property. Since those examinations I have been over the country two or three times and have confirmed my opinion that the anticline spoken of is well defined. [107] I have not dug into it as it was not necessary. There are asphaltum indications on Section 14, Township 30 South, Range 22 East. On the north flank of the anticline on this section there is a bed of coarse gravel. is on the side of the cut. The water from the hills runs over it and gives it a yellow color. A superficial examination shows nothing but yellow gravel, but when you break into it it is covered with dry oil. I have heard of the Eight Oil Company. They have locations in there now in Township 30 South, Range 23 East, and are now operating them.

CROSS EXAMINATION OF B. K. LEE.

I was connected with the Belmont Oil company

from the 6th day of September, 1900, untill the 6th day of May, 1905. I had no oil experience before 1900, but since that time I have devoted almost my entire attention to the oil business along the prospecting lines particularly, and some on development. I have had some practical experience in supervising and carrying on drilling operations. I went there in September, 1900, and on the 28th day of December our lessor commenced operations, drilling on the Kern King Well on Section 21. I was the agent of the land at that time. They drilled a well into the oil sand about the time the slump came in the price of oil along about June, 1901. They were finding some difficulties and did no more work on the well. From then on until the winter of 1903 things were very quiet. In the winter of 1903 we began operations on our own original lease in charge of the Belmont well on lots 5 and 6 and Section 11, Township 30 South, 21 East. We finished that well at a depth of 945 feet and it was a very good well, pumping about 80 barrels a day. The price of oil would not justify us [108] to go to the expense of putting in a pipe line and we did no more on the property until 1905, when I went to work for the San Francisco-McKittrick Oil Company and the C. & J. Oil Company. With those companies I have had practical field experience in sinking wells. Prior to the time that I ceased working on the Belmont Oil Company I was familiar with the general oil conditions throughout that territory. The deepest well up to the 1st of January, 1905, in that country was 2250 feet, I think. It was either on the east side

232

of Section 1, Township 30 South, Range 21 East, or on the west side of Section 26, Township 30 South, Range 22 East. It was the McKittrick Oil Company's well; that was the deepest well. The average depth of wells in that field was 800 or 900 feet up to 1200 feet. The other was an exceptional well. I found no oil sand in any portion of Township 30 South, Range 23 East. In 1909 I examined the east side of Section 36 in that township for Mr. F. J. Carman and he purchased it on my recommendation, paying \$20.00 an acre for it. I have not been on that particular piece of ground since. I have been on Section 36, however. I don't know whether Mr. Carman has ever done anything on the land. I followed the anticline right through from there to the cut and drove a team right across, a distance of about seven miles. On that trip across that township, the evidences of the wall of that anticline on that section 30 is a very strong pitch to the north. I don't know the section lines-but around in that general course. By driving back and forth you can find and trace the pitch both to the south and to the north. The pitch to the south is a little harder to find than the one to the north. It is a little more moderate to the south. The north pitch was a little more precipitous-northeast, I should say. I found the walls of the anticline to the southwest in five or six places at intervals from half a mile to a mile. Beginning from the railroad cut and crossing over, there would be [109] stretches where I wouldn't find the anticline for a mile and different places where I would find it in consecutive

gulches, maybe within a quarter of a mile. It was not nearly as well marked as that to the northeast, as the erosion had been mostly to the northeast. that territory I found no oil sand at all. I was looking for anything I could find. I don't pose as an expert; only as a prospector. If a man sent me out to find a certain condition, I can tell him. The western end of that anticline from which I started shows very clearly near a trestle in a railroad cut in the Elk Hills. At that point both flanks or walls of the anticline practically show. The southwest curvature is a very moderate anticline, probably twenty-five degrees, but it plunges underneath the surface of the wash coming from the crest. You can get the pitch there. The strike of the anticline is towards the southeast. found no indications of that anticline plunging at any point. As far as I could make a superficial examination, the axis of the anticline is practically uniform. I was engaged one day in that examination. I travelled by team. There were no roads there in 1909. I never went beyond the southeast corner of Section 36, Township 30 South, Range 23 East. When I went over to examine that land it belonged to Mr. Button. I found no gas indications on this trip. I never made any locations in my own name. Other than the occasion when I travelled across Township 30 South, Range 23 East, I never went into the Elk Hills. I once went into the southwest corner to locate a man that wanted to find a piece of ground in 31 South, Range 23 East, but otherwise I made no examination of the hills. During the time I was prospecting in

that country, I went practically over the whole country from Taft to Coalinga. At different times, when I had the time and opportunity, I would go out and prospect for information. I know the range of hills called the Buena Vista Hills. I went [110] over those, but not very extensively. At that time I confined my attention more to the main range. My headquarters were at McKittrick all that time.

REDIRECT EXAMINATION OF B. K. LEE.

I started out two or three times to make locations in Township 30 South, Range 23 East, but I found that the ground in that country was covered over one, two and three deep with locations by people who owned from eight to ten sections.

RE-CROSS EXAMINATION OF B. K. LEE.

The greatest activity was shown in that country in the matter of locating claims in the latter part of 1899 and the spring of 1900. During that time the country was plastered for miles. Not only those who were experienced in oil, but those who knew absolutely nothing about it, went in there and located the entire country. A number of these locations were made at the Court House at Bakersfield. I say this because in subsequent years I noticed where the ground was located in my immediate vicinity where no person had been in that day.

RE-DIRECT EXAMINATION OF B. K. LEE.

I did not mean in my former answers that all of the people who made locations there knew nothing about oil. There were some who did not, the same as in any mining country; that is names woud be put on

with others that did not know anything [111] about mining. I knew of no locations in Township 30 South, Range 23 East, until after the spring of 1901. The oil excitement began over there in 1899 and continued until the spring of 1901. A great many people flocked in there to investigate oil conditions. I was located at that time five miles from McKittrick on Section 11, Township 30 South, Range 21, and there was a good deal of excitement about the whole country. I don't know whether any people went into the Elk Hills to locate during that excitement, I won't say that there were none, but I don't know of any of my own knowledge. I know of a well drilled recently in Section 30, Township 30 South, Range 24 East. It was brought in by the Associated Oil Company. I was at that well last summer. The Associated had a well on Section 26, Township 30 South, Range 23 East. It showed oil at the time I was there. I think they were still working on the well. I know the wells drilled on the south half of Township 30, Range 23 East. I know other wells that have strong gas showings on the south tier of the sections in Township 30 South, Range 23 East. That land is now known as oil land.

RE-CROSS EXAMINATION OF B. K. LEE.

Work was begun on these wells in Township 30 South, Range 23 East, in the year 1910. It was told in my hearing by men in charge of the work that oil was struck in the well on Section 30, Township 30 South, Range 24 East, at 2700 feet. I don't know if that well has produced. I have not seen the well

236

since. I don't know if the well on Section 26, in that same Township, produced any oil. I do not know whether or not it is now being worked. I do not know any well in that township or in the Elk Hills that you would call a paying well. I have not been there since, perhaps, August of last year. I saw an item [112] in the paper the other day that they began repairing those wells, but further than that I know nothing. There is no pipe line from McKittrick to those fields except for fuel supply and water has to be pumped into those hills to operate those wells from the Buena Vista Lake, which is quite an expensive proposition. In 1900, 1901, 1902 and 1903 it would require a great amount of capital to go in and operate there and I would not have considered it. I never thought of it at that time but if I had had the capital I might have considered it. Of course, when a man goes to sinking a well in new territory like that he does not anticipate going to any great depth. He finds that out after making his expenditure. I don't know what my state of mind would have been if I had to go to that depth under the conditions which existed prior to the 1st of January, 1905, in that territory. I was not looking for that sort of territory at that time. I was engaged in that time in work over in Township 30 South, Range 21 East. From 1901 to 1907 there was a very lax time and not very much interest taken in oil on account of the prices. There was no stimulus for a person to acquire more property than he had and that was the condition I was in at that time. had all I could carry on.

J. I. WAGY, called on behalf of the plaintiff, having been first duly cautioned and solemnly sworn to testify the truth, the whole truth and nothing but the truth, testified as follows:

DIRECT EXAMINATION.

By Mr. Mills:

- Q. You were sworn here by Mr. Longley?
- A. Yes sir.
- Q. You live in Bakersfield, I understand?
- A. In Maricopa. [113]
- Q. When did you first go into that field over there?
- A. In Maricopa district?
- Q. Yes.
- A. In '96.
- Q. Had you been in Kern County prior to that time?
- A. I had been in Kern County since November, 1893.
- Q. What brought you into that part of Kern County, Mr. Wagy?
- A. I did the freighting there for several years from Bakersfield to Sunset district before the railroad was built in there.
 - Q. That is, hauling freight across there?
 - A. Yes sir.
- Q. What road did you take to go from Sunset to Bakersfield?
- A. Well, I followed the county road south and west from Bakersfield till I struck the plains east of the Sunset field, then almost a direct line across

the plains in a westerly or southwesterly direction toward Sunset.

- Q. Was Buena Vista dry during any time that you were freighting there?
 - A. Yes sir.
 - Q. Did you ever cross the bed of the lake?
 - A. Yes sir.
 - Q. Did the road lead across it?
 - A. No; the road led several miles south of the lake.
- Q. When the lake was dry, did your route carry you near the Buena Vista Hills or the Elk Hills in crossing the lake?
- A. Right by the east end of the Buena Vista Hills, but not near the Elk Hills.
 - Q. You know where the Elk Hills are located?
 - A. Yes sir.
- Q. Did you do any freighting through those hills. [114]
 - A. No sir; not at that time.
 - Q. Have you ever at any time?
- A. Well, I have freighted five hundred tons of stuff out of there in the last ninety days.
 - Q. Through those hills?
 - A. Yes sir.
 - Q. What route did you take?
- A. The material that I hauled out of there was on the south slope of the Elk Hills, and I hauled it across the Buena Vista Hills, most of it, to Maricopa.
- Q. Did you ever make any locations in the Elk Hills for oil?
 - A. Yes sir.

Q. Will you kindly give the names and initials of your associates, so far as you remember them?

A. H. A. Blodget, W. E. Youle, Solomon Jewett, F. Roper, H. L. Packard, T. J. Packard, C. W. Lamont and N. C. Farnsworth.

Q. Now, the gentlemen whom you have named, were they in the first locations you made there?

A. Yes sir.

Q. Where were those locations made, Mr. Wagy?

A. Well, they were all over the Elk Hills in 30-23, some in 31-23, 30-24 and 31-24.

Q. How many sections of land in the aggregate did you locate?

A. Some fifty-odd sections, as I remember it.

Q. Were these all located for oil?

A. Yes sir.

Q. What caused you to locate the particular ground that you did locate?

A. I was crossing the hills there with a band of mules, and in coming down a canyon I discovered a seepage that seemed to [115] be an oil seepage; and I got down off my horse and examined it, and it looked very much like the seepages that I had seen in the Sunset district, and it interested me very much, and I called the attention of Mr. Blodget of the firm of Jewett & Blodget for whom I was freighting to the seeps, and then afterwards I took some of the sand into town to Mr. Blodget, and we discussed the advisability of locating it, and he said he would have his superintendent from the Sunset fields meet me over there to let him examine the ground, and he came

over to my place where I was farming—I was farming at that time on Miller & Lux's land right due north of the Elk Hills—he came over and stayed all night at my ranch, and the next day we went over in the hills and I took him to this place where the seepage was and he examined it and we rode around the hills adjacent there for two or three miles, and Mr. Youle said it looked pretty good to him.

Mr. Lewers—I object to what he said as hearsay and no opportunity given us to cross-examine Mr. Youle's statements.

Q. By Mr. Mills-Go right along.

A. He said it looked pretty good to him, and he believed it was worth spending some money on it, but that he couldn't determine whether that was an oil sweat or seepage or sulphur. But the formation looked pretty good to him, and he thought it was worth spending some money to try it and see.

Q. Is Mr. Youle whom you have mentioned the man who was foreman for Jewett & Blodget in the Sunset field and came up there?

A. Yes sir.

Q. Did he come as an oil expert to examine the seepage to determine whether to make locations there?

Mr. Lewers—Objected to as leading and suggestive.

A. Yes sir.

Q. By Mr. Mills—What date was it that you discovered this oil seepage?

A. I think as near as I can remember it was sometime [116] during the year 1900.

Q. And how soon after you discovered it did you inform Mr. Blodget?

A. Well, I can't say as to the exact date. It was perhaps two or three weeks. The first time I saw him afterwards.

Q. How soon after that did Mr. Blodget order his oil expert, Mr. Youle, over there to look at it?

A. Well, it was some time. Two or three months after that, before he came over there to look over the ground.

Q. To the best of your recollection did he come there to look at the ground in the year 1900?

A. Yes sir.

Q. How much time did he spend out there looking over it?

A. We were only in the hills a little more than half a day. We rode over there early in the morning and I think we got back to the ranch about two o'clock in the afternoon or 2:30.

Q. Who was in the party that rode over?

A. Just Mr. Youle and myself.

Q. Did Mr. Youle get down off his horse and make a detailed examination?

A. We walked over the country, through several sections.

Q. Did Mr. Youle determine at that time whether there was any anticline there?

Mr. Lewers—Objected to as calling for the conclusion of the witness as to the determination in the mind of another individual, and calling for hearsay and not the best evidence.

A. I don't remember his mentioning anything about the anticline.

Q. How extensive was this cropping of sand that you speak of \ref{q}

A. Well, it was just a small outcropping in the bottom of the canyon and kind of on the side of a bluff in the bottom of the canyon.

Q. What section, township and range was it? [117]

A. It was on Section 32, 30-24.

Q. On the strength of that discovery did you discuss with Youle or anyone else the propriety of making some locations with a view of acquiring the lands for oil purposes?

Mr. Lewers—To which we object on the ground, first, that it is leading and suggestive and, second, that it calls for hearsay testimony.

A. Well, yes. We talked it over in a general way, and then afterwards Mr. Blodget called me into Bakersfield in regard to locating the property, and he made a proposition—

Mr. Lewers—I object to any statement of what Mr. Blodget said because it is not responsive, and on the additional ground specified in the original objection.

Q. By Mr. Mills-State what Mr. Blodget said.

A. He made a proposition for taking in a number of his friends and associates and locating the entire country there.

Mr. Lewers—I desire at this to give notice that I shall move to tax costs of all this hearsay testimony against counsel who is calling for the same.

Mr. Mills-Proceed.

A. The proposition was agreeable to me and we organized a company and procured surveyors who went in there and surveyed all of the hills there, and all of the unsurveyed ground, and mounded—built mounds at each corner and along the section lines and half section lines and quarter section lines, and then placed location notices on them.

Q. Were those location notices recorded with the recorder of that county?

A. Yes sir.

Q. Do you recall that there was any land in 30-23 unsurveyed at that time $\ref{eq:constraints}$

A. Yes, I think there was. [118]

Q. Was that some of the land that you refer to as having had surveyed?

A. Yes sir.

Q. Was all of that unsurveyed land included within the boundaries of the locations that you refer to—on the hills, I mean?

A. I can't be positive whether it was or not. There was some other parties came in there before we finished up and located six sections, and my best recollection is that they got some of the unsurveyed land too.

Q. You got all that you could?

A. We got all that we could; yes.

Q. Did your locations include the tops of the hills known as the Elk Hills as far as they extended?

A. Yes sir.

Q. Did you locate both odd and even numbered sections?

A. I would qualify my former answer a little bit. We didn't go to the east end of the Elk Hills. We didn't go but—on the north slope we went one mile east of 32, 30-24, and on the south slope we went perhaps a couple of miles further east.

Q. In 30-24?

A. Yes sir; in 30-24.

Q. East, you say?

A. Yes sir.

Q. But west you went as far as the hills extended?

A. Yes sir.

Q. That would include that part of the hills which is embraced in 30-23?

A. Yes sir.

Q. State whether or not the first location notices you had were printed notices or written notices. [119]

A. They were typewritten.

Q. And the second set of relocations that you made, in what were they?

A. I believe the second set were typewritten.

Q. Was there a third set?

A. On a portion of the land, yes.

Q. What were they?

A. I believe those were printed, but they were all signed on the ground. That is, the names were put on as the location notices were posted.

Q. Did you at that time regard the Elk Hills as oil territory?

A. I surely did or I would not have put in my time there.

Q. Did they include the lands embraced in 30-23, the top of the hills there, in the south half of the township?

A. Yes sir.

Q. Did Mr. Youle regard it as good oil territory?

Mr. Lewers—To which we object on the ground that it calls for the conclusion of the witness as to somebody else's mental condition.

A. We went in there on his recommendation as much as anything else.

Mr. Lewers—I move that that be stricken out as not responsive.

Q. By Mr. Mills—Was Mr. Youle at that time an oil expert in the Sunset field?

A. Yes sir.

Q. Was he regarded by oil men as a geologist?

Mr. Lewers—To which we object on the ground that it is vague and indefinite, not specifying who the oil men are, calling for hearsay testimony, and not the best evidence of the qualifications of Mr. Youle. [120]

A. He was generally considered a good, thorough oil man.

Q. And was in charge of all the properties there?

A. Yes sir; he was in charge of the Jewett & Blodget holdings.

Q. And they had extensive oil holdings at that time?

A. Yes sir; they had several hundred acres in the Sunset district.

Q. Do you know anything about the bringing in of that railroad from Bakersfield to McKittrick?

A. That was before I came to Kern county.

Q. Who surveyed the lands for you on the unsurveyed portion of the Elk Hills?

A. Mr. C. W. Lamont was one of the men, and we had another surveyor out there for several weeks, but I don't recall his name.

Q. Was that consultation and meeting of your associates and yourself with Mr. Blodget called after the report of Mr. Youle upon the oil possibilities of the Elk Hills?

A. Yes sir.

Q. And was it in response, if you know, to the report that he made?

A. Presumably so; yes.

Q. Do you know whether Mr. Blodget himself regarded the land that you located as good oil land?

A. I don't know of my own knowledge whether Mr. Blodget was ever on the land or not.

Q. He had been operating in that country, had he not?

A. He had been operating the Sunset district several miles southeast of that.

Q. Who had charge of the field work of this company for your associates?

A. C. W. Lamont. [121]

Q. What did you do in the way of developing? Did you make any roads or do anything of that sort?

A. Yes sir; I took my teams in there and built a road in from the north slope to near the center of Section 32, 30-24, and we built a house and a stable in there, and Mr. Lamont had a crew of men in there for several weeks digging shafts.

- Q. Whereabouts were those shafts?
- A. I can't say as to the location of those shafts, as I was not over the ground very much after he was in there with his crew of men.
 - Q. What year was that work done?
 - A. To the best of my recollection in 1901.
- Q. Did people in the immediate vicinity around McKittrick and the oil fields adjacent know of these locations, to your knowledge?

Mr. Lewers—To which we object as calling for the conclusion of the witness as to what somebody else knew.

- A. Well, there was quite a stampede of people came in there to relocate the following January after our first locations.
- Q. By Mr. Mills—On account of the oil excitement?
 - A. Yes sir.
 - Q. And did they relocate any of your locations?
- A. Yes sir; it was pretty well plastered before sun-up.
- Q. Did they plaster any locations in 30-23 on your locations?
 - A. Yes sir.
- Q. Now, in Section 32 of 30-24, did you notice any smell of gas \ref{gas}
- A. I did at that point where I discovered the first seepage.
- Q. State whether or not, if you know, the land you have [122] described as having located by you and your associates was generally known among oil men

and others around in that country, as valuable for petroleum.

Mr. Lewers—To which we object as calling for the conclusion of the witness, calling for hearsay testimony, and that it is vague and indefinite and does not ask for any definite standard or test by which the character of this land is to be determined.

- A. Well, I can't say as to what the general opinion among oil men was.
- Q. By Mr. Mills—You say there was a stampede in there?
- A. Yes sir; but the locators that came in there were mostly Bakersfield people. I don't remember any of them that at that time were connected in the oil business in any way.
- Q. You mean that none of the people that went in to locate lands were in the oil business?
 - A. No sir.
- Q. When they located lands they got in the oil business, didn't they?
 - A. They were trying to.
- Q. Were there many people out there during that year—the year of the stampede?
- A. Oh yes; I should say there was a hundred different people out there, to my knowledge.
- Q. Have you been over these lands pretty much yourself in the Elk Hills?
 - A. Yes sir; over every section.
 - Q. Have those lands any value for agriculture?
 - A. No sir.
- Q. Is there enough rainfall generally there to raise a crop?

- A. Not since I have been in the country. [123]
- Q. And if there was enough rainfall, are the lands located topographically so as to raise a crop?
- A. There would be small patches of it that would be, but generally speaking, no.
 - Q. Why?
 - A. It is too rough.
 - Q. What kind of a climate have they there?
 - A. It is rather a dry, warm, desert climate.
- Q. Have the lands in the springtime any vegetation at all?
 - A. In ordinary years, yes.
 - Q. Sufficient to graze sheep?
 - A. Yes sir.
 - Q. How long does that last?
 - A. From sixty to ninety days.
- Q. During the rest of the year is there any chance for sheep to make a living there?
- A. If they didn't eat it all in the spring the dry feed would be good.
- Q. Was there much money spent in there in perfecting those locations?
- A. Yes sir; there was a considerable amount of money spent but as to the amount I couldn't say.
- Q. Was it in excess of several thousand dollars in 30-23?
 - A. Yes sir.
 - Mr. Mills-Take the witness.
 - Mr. Lewers-How much is "several"?
- Mr. Mills—"Several" would be more than one and possibly more than two.

CROSS-EXAMINATION OF

J. I. WAGY. [124]

By Mr. Lewers:

Q. How much money was spent in 30-23?

A. I can't tell you.

Q. You say in answer to Mr. Mills' question that it was in excess of several thousand. What does that mean to you?

A. Well, I would say anything in excess of three or four thousand.

Q. How much of that money did you spend?

A. I didn't spend any. There was an agreement between the other people and myself that my part of the expenses should be paid by work and by team work. I furnished teams for all of the team work that was done in there and hauled all the supplies in there and I put in my own time and part of the time had two or three men from the ranch when we were surveying, and that all went in towards my part of the expenses.

Q. How many of you were associated together in these locations that you made in 1900 or 1899?

A. Ten or eleven of us.

Q. I understand you to say that you located fifty sections in all.

A. In the neighborhood of fifty. I believe it was a little bit more. We were not overlooking anything that we thought might be oil land.

Q. You did miss these six sections in 30-23?

A. The other fellows beat us to it, I guess.

Q. So, there were around sixty sections that were located at that time. You say there was somewhere around four to five thousand dollars spent in Township 30-23. Is that correct?—on the unsurveyed land?

A. That much or more, but I can't say as to how much more.

Q. How much was spent on the other locations outside of that township. [125]

A. I can't tell you what was spent on each separate township, but I know we had about thirty men in there for several weeks at one time.

Q. What were they doing?

A. They were surveying and building mounds, and there was several shafts dug.

Q. Where were these shafts dug?

A. I can't tell you the point now or the sections where they were dug. I did know at the time as we made a map that Mr. Lamont and I prepared, and he marked on that map where each one of the shafts were sunk. But I have not seen the map for three or four years.

Q. Were you at any of those shafts yourself?

A. Not after they were dug.

Q. Were you at the time they were dug?

A. While they were digging, yes sir.

Q. Did any of those shafts reveal mineral in any quantity—

A. No, not when I was there.

Q. By Mr. Mills-Had you finished your answer?

A. Not quite. I was going to add that when I

was there when Mr. Lamont and I rode over the country looking at the locations, and I wasn't on the ground afterwards in other places.

Q. By Mr. Lewers—Do you know of any of those shafts revealing mineral?

A. I do not.

Q. Never heard of it?

A. No sir.

Q. So far as you know none of them revealed mineral?

A. Not to my knowledge.

Q. They were simply shafts dug in the hills without regard to whether you found anything or not?

A. We used to consider in those days that we had to do so [126] much assessment work, and it was done for assessment work purposes.

Q. Did that disclose any mineral in place?

A. Not to my knowledge.

Q. You also understood that you had to do a certain amount of location work?

A. Yes sir.

Q. Was that location work done on all of these claims?

A. It was scattered all over the hills, but the shafts were not sunk on all of the claims.

Q. Then there were many claims on which no work was done?

A. Except the surveying and mounding.

Q. That is, marking out the boundaries was all that was done upon many of the sections?

A. Yes sir.

- Q. And on the other sections where you did dig shafts it disclosed nothing?
 - A. I don't know whether it did or not.
- Q. You don't know of anything that was disclosed?
 - A. I do not.
- Q. And you say that the following year a number of people came in there and relocated many of your claims?
 - A. Yes sir.
- Q. Did you make any effort to prevent their doing so?
- A. No sir. We went in there and relocated all of it ourselves.
 - Q. That is, you relocated all of it?
- A. Where we didn't have our assessment work done.
 - Q. Did you continue to do that afterwards?
 - A. Yes sir.
 - Q. For how long?
- A. Six or eight years. In fact, we kept on on part of it [127] till the lands were withdrawn from entry.
- Q. Did you in any work that you did on any of those relocations ever discover mineral in place anywhere?
 - A. No sir.
- Q. What did your relocation work consist of from year to year?
- A. It consisted of posting notices on the land and recording the same.

Q. That was not very heavy labor?

A. No sir; it was while it lasted, but that part didn't last long. We had to go out there at twelve o'clock at night and lay in the sage-brush and pretty near freeze to death till twelve o'clock, and then see if we could beat the other fellow to it.

Q. Then you did nothing but post the notices?

A. We did some work. We kept Lamont there three or four years.

Q. What was he doing?

A. We considered he was trying to hold possession of the ground.

Q. What was he doing?

A. Riding around over the country.

Q. Was he doing any work besides riding around?

A. No; nothing towards development work.

Q. Do you know of any discoveries that he made during that time?

A. No sir.

Q. Of mineral of any kind?

A. I do not.

Q. Don't you know as a matter of fact that he did not discover mineral of any kind?

A. I do not. [128]

Q. You never heard of his discovering any, did you?

A. Yes.

Q. What did he discover?

A. Well, he told me that he had discovered oil formations in different points on the land, and he had marked out on this map that I speak of where they were.

- Q. Did he discover any oil?
- A. No.
- Q. Then the only mineral discoveries that he made that you heard of were some oil formations?
 - A. Yes sir.
- Q. How many sections do you now have locations upon?
 - A. None.
 - Q. You have entirely abandoned all of them?
 - A. Yes sir.
- Q. Have you attempted to relocate any of them at any time within the last two or three years?
- A. No sir; not since the land was withdrawn from entry.
 - Q. Is the land now withdrawn from entry?
 - A. I understand so.
 - Q. Still is?
 - A. I think so.
- Q. Have you ever made any inquiry to know whether the withdrawal was removed?
- A. Not recently, no, because the whole country was relocated again and derricks built all over it.
- Q. The lands were withdrawn from entry about February, 1900, were they not?
 - A. Not that ever I heard of.
- Q. You had locations made on that ground after February, 1900, did you not?
 - A. Yes sir. [129]
- Q. And continued to relocate on the 1st of January up to what time?
 - A. 1908 or '9, on a portion of the land.

- Q. Up to 1909? How much land up to 1909?
- A. I think we had dropped all but about three sections.
 - Q. And where are they?
- A. One of them was section 32, 30-24. I don't remember the other two sections now. They were right around there or close to it.
 - Q. Any of them in 30-23?
- A. There might have been one of them. I can't say positively. There might have been one section in 30-23.
 - Q. Which section was that?
- A. I can't tell you; I don't remember now. In fact, the last locations put on there, I didn't do it. There is a friend of mine living here in Los Angeles that wanted me to let him in on it, and I gave him a map of the country and he went up there. He asked me before he went what sections I wanted him to go in on, and I said outside of 32 I would leave it to him, as he was better posted on oil than I was, and I would leave it to his judgment.
 - Q. Do you know what he did?
 - A. No sir.
 - Q. Did you ever inquire?
 - A. Yes sir.
 - Q. Did you ascertain when you inquired?
- A. No, for the reason that the location was lost and we found out it was located by other people. We found other people had taken possession of our cabin and made their location notices out and recorded them and doing work on the ground.

- Q. What where they doing?
- A. Digging pits for fuller's-earth or something that they [130] claimed to have discovered, and I went home and forgot about it.
 - Q. Dismissed it from your mind?
 - A. Yes sir.
 - Q. Had more important things?
- A. I wasn't looking for a fight, when they had the best of it.
- Q. You say there was a regular stampede after you made your locations? What year was it?
- A. It was either the 1st of January, 1901 or 1902. I am not positive which.
- Q. And you say none of these people were oil men?
 - A. None that I knew of were oil men.
 - Q. Commonly known as "tenderfeet"?
 - A. Yes; "hayseeds" like myself.
- Q. And isn't it a fact that during the oil excitement such men located pretty promiscuously, whether there were oil indications or not?
 - A. I presume it would be so.
- Q. Do you know as a matter of fact whether they did?
- A. Yes; I think there were some parts of the country located where there were no oil indications in sight.
- Q. When you and your ten associates went in there and located between fifty and sixty sections there, did you seriously anticipate or expect that you

were going to go ahead and develop all of that property?

A. We didn't expect that we would do it ourselves, but we expected at that time to interest people in there to lease it.

Q. It was a speculation, wasn't it?

A. And to improve what we could improve, and the fact of the matter was we were in a very fair way of accomplishing it when the slump came in the oil business.

Q. That is, you took it up as a speculation? [131]

A. We took it up to make some money out of it if we could.

Q. Did you think of the amount it would cost you to do the location work on those sections that you took up?

A. That it would take to do the location work?

Q. Yes; just the location work.

A. I never figured it up; no. We went in and located it and let the fellows that put up the money figure.

Q. Do you know how much was put up altogeth-

er that first year?

A. I don't know of my own knowledge. It was discussed amongst our people, though, that there were about \$40,000 spent.

Q. It would take twice that to do the actual location work on the ground that you had?

A. No sir.

Q. How many claims did you figure to the section?

A. Four.

- Q. And you now recollect how many sections you had altogether?
 - A. Somewhere in the neighborhood of fifty.
 - Q. But it was more than fifty?
- A. I think there was fifty-one or fifty-two sections, to the best of my recollection.
- Q. Do you know whether this stampede of people that came in after you had located all this territory did their location work?
- A. All I know of their doing was to come in and post their notices—location notices—and record them.
- Q. Did you ever know of any practical oil men going in there to relocate any of those claims that you had located?
 - A. Not at that time, no sir.
- Q. You mean that you did know of their doing so at some other time? [132]
 - A. Yes sir.
 - Q. When?
- A. When they took our last three sections away from us.
 - Q. When was that?
 - A. 1908 or '9.
- Q. Then prior to that time you didn't know of a practical oil man going in there and relocating any of the ground that you had there?
 - A. Outside of my own associates, I do not.
- Q. That ground was generally understood by you to be open to relocation, was it not?
 - A. Yes sir; it was at that time.

- Q. And that was generally understood in the community, was it not?
 - A. Yes sir.

260

- Q. Now, you say the last time you hauled any freight in the Elk Hills was within the last ninety days?
 - A. Yes sir.
 - Q. What was that?
- A. I hauled some rigs out of the Elk Hills to Maricopa.
 - Q. Out of what portion of the Elk Hills?
 - A. The south slope.
 - Q. In what section?
- A. I don't know what section they were on. I was not interested in the property at all. I was just contracting to take the stuff out.
 - Q. For whom?
 - A. Charles Dickinson of Maricopa.
- Q. Do you know to whom the rigs had belonged—the derricks?
- A. He bought them, I think, at sheriff's sale. I don't remember now. I don't know that I ever did know whom they [133] belonged to.
- Q. Can you fix any closer just where they came from? Can you fix the township from your knowledge of that country?
- A. Well, they were very close to the corners of 30-23, 30-24 and 31-23 and 31-24. They were right near the corner of those townships.
- Q. But you don't recollect which township they were in?

A. I do not, because I was not there for so long that I didn't know where the line runs there, and while I was freighting in there, I was only there twice.

Q. Were they up in the hills or where?

A. They were back in the hills, I should say, about a mile and a half.

Q. How many of those derricks did you haul out of there?

A. Eight complete rigs.

Q. You say when you made the locations, you and your associates, you thought the Elk Hills was oil territory?

A. Yes sir.

Q. Could you say at that time that you knew it contained valuable oil deposits?

A. No, I couldn't say such a thing as that, of course.

Q. That is, you thought it was a prospect that would warrant taking a chance on?

A. Yes sir.

Q. Had you any idea how deep you would have to go to find oil?

A. No sir.

Q. Had you any idea whether or not if you did go down you actually would find oil?

A. We had an idea that we would, or we would not have gone in and spent any money on it.

Q. You didn't spend any money putting up a derrick and [134] putting a rig in there?

A. No sir.

Q. Did you ever attempt to do so?

A. No sir.

262

- Q. Did you ever make any arrangements to do so?
- A. We were, when the slump in oil came.
- Q. How long did that slump continue?
- A. Six or seven years.
- Q. Up to when?
- A. 1907 or'8.
- Q. When did the slump begin?
- A. In the summer of 1901, to the best of my recollection.
- Q. From the time you made your locations in '99, did you endeavor to do any actual drilling or oil development work?
 - A. I did not.
- Q. Were you in a position where you could have interested capital, you or any of your associates?
 - A. Yes sir.
 - Q. And plenty of it?
 - A. Yes sir.
- Q. Now, there is a considerable portion of the Elk Hills that is used for grazing during the spring months?
 - A. Yes sir.
- Q. You have seen sheep grazing over that entire country, have you not?
 - A. Lots of times.
- Q. And in ordinary years the winter and spring rains produce quite considerable grass, do they not?
 - A. Some years it produces a very fair feed crop.
- Q. And that furnishes feed for sheep for how long?

- A. As long as the grass stays green; from sixty to ninety days. [135]
- Q. And then the sheep are moved to the summer range $\ensuremath{\text{?}}$
- A. They take them out of there. I don't know where they take them.
 - Q. You are not familiar with the sheep business?
 - A. No sir.
 - Q. Did you ever see anything else except sheep?
 - A. On the lower hills I have seen cattle.
 - Q. Do you know of the elks grazing in there?
 - A. Yes sir.
 - Q. How many of them?
 - A. About two hundred.
- Q. Are you familiar with Section 16, Township 30 South, Range 23 East?
 - A. No.
- Q. Do you remember a portion of that township that is now under cultivation in small ranches?
 - A. No; I do not.
 - Q. When were you last in there?
 - A. I haven't been on the north slope since 1906.
- Q. Was there any oil shown at the place where you removed these derricks within the last ninety days?
 - A. Yes.
 - Q. What was it?
- A. Well, there was oil scattered around there. I don't know how it got there. There was one of the rigs where they had drilled a hole down several hundred feet deep, that there was a good deal of oil all around there, and a big tank of oil standing there.

Q. Do you know whether it was hauled out of the well or hauled there?

A. I don't know how it got there. I emptied it on the ground to get the tank out. [136]

Q. How about the other rigs?

A. There was one, though, that had a small amount of oil in the tank.

Q. Could you determine where the engine had been located?

A. Yes sir. I took it down.

Q. Was that near where you found the oil?

A. Yes sir.

Q. And every indication was that the oil was hauled in from somewhere else?

A. Presumably so, yes.

Q. No doubt about it?

A. I would hate to say that it came out of the ground. I didn't make any investigation of where it came from.

Q. You found oil on the bearings of the engine, too, didn't you?

A. Yes sir.

Mr. Lewers-That is all.

REDIRECT EXAMINATION OF J. I. WAGY.

By Mr. Mills:

Q. The order of withdrawal that you refer to was in 1909—when the land was withdrawn?

A. Yes sir.

Q. That is, the Secretary of the Interior's order of September, 1909?

A. Yes sir.

Q. What is this land worth for pasture, —the land on 30-23?

Mr. Lewers—Objected to on the ground that no foundation is laid to show that the witness has knowledge of the rental [137] value of the land for pasturage in that vicinity. On the contrary, it appears from the witness's testimony that he does not have such knowledge.

Q. By Mr. Mills—What value has it for pasturage?

A. You mean the rental value?

Q. Yes.

A. I should say about ten cents an acre. That is as much as I would pay for it.

Q. Per year?

A. Yes sir.

Q. You say you have seen elk in there?

A. Yes sir.

Q. During most of the season don't they graze in the flats?

A. They graze in Miller & Lux's alfalfa field.

Q. They wouldn't get very much sustenance in those hills?

A. Not in the summer, no sir.

Q. Did you know anything about the railroad company known as the Southern Pacific Railroad Company selling as agricultural lands certain portions of the south half of Township 30, Range 23 East—the odd numbered sections—in 1904?

A. No sir.

- Q. You had locations on that land yourself at that time?
 - A. Yes sir.
- Q. State whether or not in any part of the year 1904 those locations which you made were on the records in Bakersfield, Kern County.
 - A. They were.
- Q. Were the mounds on the ground? The monuments that you built there locating your claims there during the year 1904?
 - A. Yes sir. [138]

RECROSS-EXAMINATION

OF

J. I. WAGY.

By Mr. Lewers:

- Q. Had you made a discovery of mineral on any one of them?
 - A. No sir; not to my knowledge.
- Q. Mr. Wagy, what part of the Elk Hills do you now consider to be mineral, if any?
- A. I don't know. That is a pretty hard question to answer, because I have not been in the Elk Hills only twice since 1906.
- Q. Do you consider the western portion of the Elk Hills to be mineral or oil bearing?
- A. I have not been in the western portion of the Elk Hills since 1906.
- Q. The question is, do you now consider it to be mineral lands or oil bearing lands?
 - A. I do, because I have seen nothing to change

my opinion from my former opinion when I was interested there.

Q. That is, you consider both east and west portion of the Elk Hills to be mineral and oil bearing lands?

A. I can't say that about the east, especially the southeast, because I hauled a lot of material out of that country, which was abandoned, which would naturally make me think there was no oil there.

Q. In the southeasterly part?

A. Yes sir.

Q. How about the western part?

A. I haven't been there myself, but I have heard they struck oil there. I would naturally consider it was good oil territory.

Q. Are you acquainted with a man named Myers —Alfred [139] Myers?

A. No sir.

Q. Did you not meet a man named Alfred Myers in the first week of this month and have a discussion with him as to the character of the Elk Hills?

A. What was he? An inspector? There have been so confounded many around there of those people on forest reserve business—

Q. No; he was a field agent of the Southern Pacific.

Mr. McCormick-Railroad or Company?

Mr. Lewers-Railroad Company.

A. There was a gentleman saw me in there one day, but I can't say what his name was.

Q. You had a conversation with him?

A. I did.

Q. Did you not in that conversation state to him in substance that you didn't regard the western portion of the Elk Hills and western portion of Township 30 South, 23 East, as mineral or oil bearing territory?

- A. No; I never made any such statement as that.
- Q. Did you state to him anything in substance to the effect that any portion of the Elk Hills did not contain oil?
 - A. Yes sir.
 - What portion?
 - A. The portion where I hauled the material out of.
- Q. Did you not also tell him that the western portion, and the western portion of this Township 30-23, in your opinion, was non-mineral?
- A. No; I didn't make any statement like that because, as I say, I have not been in that country myself since 1906, and at that time we were in there chasing elk and not looking for oil lands. [140]

REDIRECT EXAMINATION OF

J. I. WAGY.

By Mr. McCormick:

- Q. When was it that you met this party?
- A. It was some three or four weeks ago.
- Q. Did he give you his name?
- A. Yes sir: he introduced himself.
- Q. Do you remember whether it was Myers?
- A. Yes sir; I believe it was Mr. Myers.

- Q. Did he tell you what his business was or why he wanted to talk to you?
 - A. Yes sir.
 - Q. What did he say about that?
- A. He said he was there looking for information for the S. P. Company in regard to the Elk Hills, and he asked me a few questions about it and he asked me if I was the Wagy on the early locations in there, and I told him I was, and he asked a question at that time, "Did you consider that oil territory?" And I told him "Most assuredly I did, or I would not have spent my time and money there."
 - Q. Was there anyone with him?
- A. There was a number of people in the office at that time.
 - Q. Which office was that?
 - A. In my office.
 - Q. Your own office?
 - A. Yes sir.
 - Q. Is that where you had the talk with him?
 - A. Yes sir.
 - Q. How long did the conversation last?
 - A. Only a few minutes. [141]
 - Q. Did you see him more than once?
 - A. No sir.
- Q. Did he mention the fact that it was in connection with this present suit that he was up there or seeking to acquire information?
- A. I don't remember whether he mentioned that directly or not, but I inferred that it was.

- Q. Did he talk to anybody else there, to your knowledge, about the same matter?
- A. Not to my knowledge. He asked me about some parties that had been in there, and I told him where to find one man—a man named Kenzie.
 - Q. What were his initials?
 - A. David.
 - Q. What is his address?
 - A. Maricopa.
- Q. Have you told us now about all this Myers said to you and you said to him at the time?
- A. I think so, because we didn't talk very long, and when I made the statement that I did about what I thought about the country when I made the locations, he kind of laughed and he said "I don't think you will do me much good", or something like that, and we laughed it off and he bid me good day and left.

OF J. I. WAGY.

By Mr. Lewers:

- Q. He didn't make any effort to conceal his purpose in seeing you?
 - A. No sir.
 - Q. Or his identity? [142]
- A. No sir. He told me who he was and that he was there—I couldn't say positively whether he said it was for this case, but anyway, I inferred that it was regarding this case, from the conversation.

- Q. There was more conversation between you than what you have given here?
 - A. Perhaps in a general way.
- Q. Didn't he ask you more questions than what you have here stated?
 - A. I think not.
- Q. Didn't he ask you specifically about different portions of the townships?
- A. Well, he asked me about where the seepage was that I discovered, and I told him that it was on —I think he had a map himself. I don't remember what portion of the section, but I remember the section, and he had a little map with that marked on it, and asked me if it was about that location, and he asked a question if I had found any seeps of that kind in 30-23.
 - Q. What did you tell him?
 - A. I told him that I had not.
- Q. Do you recollect anything being said about hauling out stuff there?
- A. Yes sir; there was something said about that, because we were laughing about the southeast. I told him most assuredly I didn't think there was anything where that material came out of, because there was five hundred tons of stuff that I hauled out of there, and that they would not have abandoned it if they didn't have a pretty good idea that it was barren territory.
- Q. In that connection, did he not ask you about the western portion of the township?
 - A. I think he asked about it, but I think I told

him the same as I did you,—that I hadn't been in the western portion. [143]

- Q. Didn't you tell him that it was non-mineral?
- A. No sir.
- Q. Did you tell him it was mineral?
- A. No; I think he asked the question—he asked me something about whether I had hauled anything out of the western portion, and I told him I hadn't been there or in the Elk Hills at all only where I hauled those rigs from, for years.

Whereupon the further taking of testimony herein was adjourned until Saturday, April 20, 1912, at 10 o'clock A. M., at the same place.

W. E. OTT, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I live in Los Angeles and have been engaged in the oil business about seventeen years. Most all of my experience has been in California, but I had some little experience in Texas. I have been in Indian Territory in Kansas looking over some of the oil fields there, but I never was engaged in the business. In California I worked in Los Angeles first, Summerland, Bakersfield, McKittrick, Santa Maria and Coalinga and in the Midway fields. I first came to McKittrick in April, 1901. The first time I went out there was on a pleasure jaunt or trip with Mr. J. B. Treadwell. On the second occasion I went out there at Mr. Treadwell's request and assumed charge of the S. P. Company's property at McKittrick, as

superintendent. My duties as superintendent did not call for actual drilling, but my duties were to oversee the work in general. The drilling I did-development work was under contract. It was a verbal one. I knew that the contract was with the Southern Pacific Railroad or the Southern Pacific because Mr. Treadwell told me so. Our south end lease I think was [144] on 29 or 20; I think probably it went around the line. Another lease we had on 40 acres was about midway at the north end. I don't remember what section it was on. I had done previous work under contracts for the same company. I was always informed that it was the Southern Pacific Railroad Company. My previous contracts were in the Kern River Fields on Section 3 and in Summerland in Santa Barbara county. My work brought me in contact with a man by the name of E. T. Dumble. He was introduced to me by Mr. Treadwell. Treadwell told me that Mr. Dumble was connected with the S. P. Company as their coal expert. During his first trip, Mr. Treadwell took Mr. Dumble around the field and on the second trip he did the same thing and Mr. Treadwell finally informed me that Mr. Dumble was to succeed him and advised me to resign, which I did. At that time Mr. Treadwell was with the Southern Pacific Railroad Company as their oil expert and superintendent of their oil fields. Mr. Dumble succeeded him, I think, in 1903. When I first went there we paid our men by checks on the Bank of Bakersfield. The checks were ordered on Mr. J. B. Treadwell. On an average we were producing less than two cars

a day from the south end lease and none from the north end. This oil was delivered to the Southern Pacific Railroad Company. I presume, by my bookkeeper, as he handled that end of the business. I turned it over to him. His name was C. A. Hiveley, who, I believe, is now the General Manager of the Kern Trading & Oil Company, a subsidiary of the Southern Pacific. I think the lease at the north end belonged to the railroad company. The other two leases that I was operating on were leased. Mr. Treadwell, in his activities as an oil expert of the Southern Pacific Railroad Company, was about there looking up lands for their mineral value. I found some indications at one time there and he gave me a gentle jacking up because I hadn't told him about it. These were some lands that he regarded [145] as mineral and they consisted of a 40 acre piece on one corner of the company's property, that is, property which they claimed to own or leased. Mr. Treadwell and C. A. Boynton, I believe, located some land in the Midway district. In my opinion, Mr. Treadwell was a competent oil expert and was a man of wide and varied experience and a man of very good judgment on land values. The only evidence that I have that the Southern Pacific Railroad Company, as Mr. Treadwell's principal, had confidence in his judgment as to the value of mineral lands in that locality, is the fact of his retaining his position and their having sent him to the Beaumont Fields in Texas and the Louisiana Fields, in their interest. There were certain lands in that district with J. B. Treadwell's

name on them and I asked Mr. Treadwell how that occurred and he said it was through Collis P. Huntington that his name was used on that land. Just why it was used he did not see proper to continue the conversation and he did not tell me any further and I did not ask him. I understood from the conversation that the lands were not his own, but belonged to the Railroad Company. The reason I thought that was that his name being on so many pieces of land around there, it looked peculiar to me, for I thought I knew Mr. Treadwell didn't own the property, and it naturally aroused more or less curiosity, and I asked Mr. Treadwell the question how it happened that his name was on that land. He said, at the instance or suggestion of Mr. Huntington-Collis -for the S. P. I knew Prof. Owen. He was a geologist in the employ of the Southern Pacific Railroad Company. I saw him prior to 1904 in McKittrick, and also in Kern City. The first time I met him was at the train in McKittrick. I was going away. Someone introduced us and he handed me a letter from Julius Kruttschnitt, Fourth Vice-President and General Manager of the Southern Pacific Railroad Company. The letter recommended Mr. Owen to me and asked me to extend to him all the courtesies of my [146] office, as the company's geologist. It was signed by Julius Kruttschnitt. This was in the latter part of 1902. I subsequently met Mr. Owen during the time I was in the employ of the Southern Pacific Railroad Company. He was a very quiet man and not given to making many remarks or giving out his business,

but it was evident on the face of it that he was looking for signs of oil bearing lands. He was riding out through the country and would be gone hours at a stretch. Where he went, I do not know. He never asked me to accompany him. The wagon and horses that he used belonged to the Southern Pacific and the man who drove him out was in the employ of that company. After the severance of my relations with the company, Mr. Dumble was there on a few occasions and he would go out in the company's rig with Prof. Owen. During my incumbency of the office I saw Mr. Owen go out in the country several times and afterwards, when I was a contractor, I saw him every little while. Before Prof. Owen's time, some of the officials of the Southern Pacific Railroad Company visited the fields. They were E. H. Harriman, Julius Kruttschnitt and D. Burkhalter, the division superintendent of the San Joaquin Division. I drove Mr. Harriman, Mr. Kruttschnitt and some other parties who were with them, around the Company's property. From Mr. Harriman's conversation with me, I learned it was a tour of inspection. In fact, I knew it was a tour of inspection, because I had been notified by J. B. Treadwell, who was my immediate superior, that Mr. Harriman and Mr. Kruttschnitt were coming and for me to extend them all courtesies. Mr. Kruttschnitt telegraphed me to meet them at Bakersfield with a special train. Mr. Treadwell told me in a letter that they would be there on a tour of inspection of the oil fields. I had a conversation with Mr. Harriman. He spoke of

the properties in a general way. He was anxious to see the wells and seemed to be fairly pleased with our little production. He made some remarks [147] however, that he thought it would be a good idea if we would drill our wells deeper, speaking of a certain well in another district that had been deepened and had made a better production. He was inquisitive as to the depth of the Reward well and wanted to know where the sands were and I told him. In driving around we passed the asphalt mine, which was a very rich one, and which at that time was under the control of R. H. Howk, and Mr. Harriman seemed to think pretty well of that rich asphaltum and asked me the question why it was we didn't own that property. By "We" he referred to the Southern Pacific Railroad Company. I have been in the Elk Hills territory four or five times. I always thought there was oil there. It was the general belief among oil men along McKittrick that the Elk Hills were oil territory. I heard it talked about all the time I was there; as early as 1901 and 1902. In fact there were rigs over in portions of that field at that time which had more or less oil. How much they had, I don't know, while I was superintendent there. Mr. Owen, in speaking to me of the territory in general from McKittrick up to Sunset, which is known now as the Midway District, said that it would be a great field.

CROSS-EXAMINATION

OF W. E. OTT.

By Mr. Lewers:

Q. During how long a time were you acquainted with Mr. Owen?

A. Well, I was acquainted with Mr. Owen from the time he first came to McKittrick—when I first met him.

Q. The question is, during how long a time in months or years.

A. Well, I expect I knew the Professor for the biggest end [148] of the year, anyway.

Q. And how often was he there during that time?

A. He was simply there several times. I can't say how long.

Q. At any one time how long was he there?

A. He would generally come in and stay around McKittrick a few hours and then disappear.

Q. Disappear where?

A. That I couldn't say. He would generally drive out somewhere.

Q. Driving around the country?

A. A great deal.

Q. How long a period would he remain with Mc-Kittrick as his headquarters while he was making these trips around the country? Was he there a week, a month, or a couple of days?

A. I don't think he ever made any protracted stays there, to the best of my recollection I would see him—he would come in today and go out through the fields somewhere, and I might see him the next day and I might not, and I might see him the following day. Whether he came back to McKittrick that night or not I can't say. He may have come back the same night that he went out. He may have come back every

night, but I doubt it very much. I believe he did some camping out.

Q. Do you know in what direction he went when he drove out on any of these trips?

A. Well, sir, he went to the four cardinal points of the compass.

Q. That is, he went everywhere?

A. Yes sir.

Q. So far as your observation went he examined the country quite generally, did he not?

A. Yes sir; he was examining it off and on all the time he was there. [149]

Q. The lease that you were employed upon is near McKittrick, is it not?

A. One of them.

Q. Which one?

A. The South-end lease. The old lease.

Q. And the North-end lease is about three miles from that?

A. Some three or four miles; yes.

Q. And neither of those leases are in the Elk Hills, are they?

A. No; I don't think the Elk Hills are designated on that side of the valley at all.

Q. There is a valley between the Elk Hills and the two leases?

A. Yes sir; there is a little valley. There is a short range of hills connecting just beyond our lease, toward Sunset, that I think they connect up pretty close with the Elk Hills.

Q. Do you know whether they do or not?

A. I can't swear to it.

Q. You are not very familiar with that country in there?

A. Not in particular. My duties did not permit my chasing around very much.

Q. You simply drove through occasionally when you were going about some other business?

A. Yes sir.

Q. You didn't go and make an examination of the Elk Hills, did you?

A. No sir.

Q. And you never did make an examination of the Elk Hills?

A. No.

Q. Simply drove through?

A. Drove through.

Q. And your mind was attracted and directed to the business [150] that you had on hand more than to prospecting for oil?

A. Possibly it was and possibly it was not.

Q. Which was it?

A. I might have been thinking of business or something else. I didn't always drive around on business.

Q. You may have been doing one or the other, but I want to know which you were doing?

A. As a rule, when I drove through the Elk Hills I was going hunting.

Q. Hunting what?

A. Whatever I could find.

Q. What were you hunting to find?

A. Sometimes ducks, sometimes rabbits, coyotes and various kinds of game.

Q. You didn't expect to find ducks up in the Elk Hills?

A. I don't think I ever saw any ducks in the Elk Hills.

Q. When you were hunting ducks you were going over to the lake?

A. Yes sir; either to the lake or close by the lake.

Q. And when you were hunting quail where did you go?

A. Around the hills.

Q. Which hills?

A. Various hills. Principally towards Temblor in hunting quail.

Q. That is to the west or southwest from McKittrick?

A. Let's see. If I recollect rightly Temblor is north and a little west. I can't be positive of that, but I think it is.

Q. Where did you go when you were hunting for rabbits?

A. Sometimes on what we call the McKittrick Hills. Sometimes on further down by the railroad track, and various places.

Q. Did you ever go up into the Elk Hills hunting for rabbits? [151]

A. I never went there especially for rabbits. I have driven in there and shot them or shot at them from my buggy.

Q. You say you have driven through the Elk Hills. What portion of the Elk Hills was it that you shot rabbits from your buggy?

- A. Generally down along the railroad track.
- Q. Toward Buttonwillow?
- A. Yes sir.
- Q. There is a road leading down in that direction?
- A. Yes sir.
- Q. That would be the west end of the Elk Hills, would it not—near the railroad?
 - A. The west end? I am not sure about that.
 - Q. It was not the east end, was it?
 - A. I am not sure.
- Q. Do you know where the east end of the Elk Hills is?
 - A. I am not sure that I do.
 - Q. Have you ever been there?
 - A. I don't know.
- Q. Have you ever been in the west end of the Elk Hills?
 - A. I can't tell you that, either.
- Q. You don't know whether you have either been in the west or east end of the Elk Hills?
- A. I have been in the Elk Hills. Whether you term it east end or not or west end or north end or south end, I can't say.
- Q. You don't know where you have been in the Elk Hills?
 - A. Not as to directions.
- Q. Have you ever been on the north slope of the Elk Hills?
- A. The north slope would be towards—yes, I have
 —it would be the northwest slope.
 - Q. Near the railroad?

- A. Yes sir. [152]
- Q. Now, can you recollect any other portion of the Elk Hills you were ever in?
- A. Yes sir; I have been through the Elk Hills following the railroad track, and I went into the Elk Hills proper, a mile and a half beyond McKittrick, going north.
- Q. A mile and a half beyond McKittrick? In which direction from McKittrick?
 - A. Going north.
 - Q. North from McKittrick?
 - A. Yes sir.
- Q. And you considered that as a portion of the Elk Hills?
 - A. Yes sir.
- O. I understand you to say that you have been in the Elk Hills near the railroad track and also north from McKittrick?
 - A. Yes sir.
 - Q. Anywhere else?
- A. North and a little east. In this portion that I speak of, north and a little east, I was hunting.
- Q. The question is were you in any other portion of the Elk Hills?
 - A. I have been since that.
 - Q. Since when?
- A. Since I left the employ of the Southern Pacific Railroad Company.
 - Q. When was that?
 - A. 1903.
- Q. Well, how long since? Immediately or several years?

- A. Well, I was in there about a year ago.
- Q. And when before that?
- A. I was there before that, yes.
- Q. How long before?
- A. A few months before that. It might have been five or [153] six or seven months.
- Q. That constitutes the number of times and places you have been in the Elk Hills generally, does it?
- A. Yes; I may have been in the Elk Hills to some extent, but I can't call it to mind.
- Q. You won't pretend to say that you are familiar with the Elk Hills?
 - A. Not particularly, no.
- Q. Have you been in Township 30 South, Range 23 East?
 - A. I can't tell you.
- Q. You say that Mr. Dumble was down there how often while you were employed?
- A. I think Mr. Dumble was there probably four times when I was there.
- Q. Did he make any examination of the country as Mr. Owen did?
 - A. He and the Professor were out together.
- Q. Was he ever out by himself when Mr. Owen was not present that you know of?
- A. I don't think that he ever was. If he was, it was not to my knowledge.
- Q. And you say your recollection is that Mr. Owen made a very extensive examination of the territory in all directions from McKittrick?

- A. Yes sir.
- Q. Down on the Buena Vista Hills?
- A. He went everywhere. Where he went, I don't know. I can give no definite points.
- Q. And you say that he referred to certain territory as being oil territory?
 - A. Yes sir.
 - Q. That was where? [154]
- A. The general district lying between McKittrick and Sunset.
 - Q. That is, to the southeast from McKittrick?
 - A. Yes sir.
 - Q. Down along that range of hills?
- A. I inferred from his remarks that covered the flats and hills in through there.
 - Q. Between McKittrick and Sunset?
 - A. Yes sir.
- Q. And you never heard him say that the Elk Hills were good oil territory?
 - A. Only in a general way, of that whole country.
- Q. Did you not testify on the direct examination that you never heard Mr. Owen or Mr. Dumble either say that the Elk Hills were good oil territory?
 - A. I did.
 - Q. And that is the fact?
- A. Yes sir. And in modification I say only in a general way of the country from the McKittrick district to the Sunset district—if that includes any of the Elk Hills, then he did; if it does not, he didn't. That is all.
 - Q. Does the country in a general way from Mc-

Kittrick to Sunset district include any portion of the Elk Hills?

- A. I am not sure but what it does. I am not positive of that.
- Q. Is it not a fact that the Elk Hills lie a considerable number of miles north of that range of hills from McKittrick to Sunset?
 - A. I can't tell you.
- Q. You are not familiar with the country enough to tell?
 - A. No sir.
 - Q. How long were you in McKittrick ? [155]
 - A. From 1901 to 1903.
- Q. And you don't know whether the Elk Hills lie to the north of the range of Hills leading from Mc-Kittrick to Sunset?
 - A. No sir.
 - Q. Do you know where the Elk Hills are?
- A. In a general way. I have been telling what were called the Elk Hills in a general way. That is all hearsay testimony with me as to where they are and what they are.
- Q. You say there was a general belief amongst oil men that the Elk Hills were oil territory. Is that correct?
 - A. Yes sir.
 - Q. And when did that belief exsist?
- A. All the time I was out in that country and up to the present time.
- Q. Will you kindly mention any oil man that told you that the Elk Hills were oil territory?

- A. Oh, I have heard a number of them. I think Mr. Wible made a remark of that kind.
 - Q. When?
- A. Some little time ago. I didn't know Mr. Wible till I was in McKittrick quite a little while.
 - Q. How many years ago did he make that remark?
- A. Possibly in the latter part of 1901 or as early as 1902.
 - Q. Where was that remark made?
- A. It may have been in Bakersfield. I think probably it was.
 - Q. What was the remark he made?
- A. Just in a general way, speaking of the Elk Hills, like oil men will gather around and talk.
 - Q. What did he say?
 - A. I told you what he said. [156]
- Q. Not yet. Will you kindly give me as near as you can what he said?
- A. He was speaking of the Elk Hills in a general way and he made a remark that it was good territory. I can't say that those were the exact words, but that was about the way it was.
- Q. Did he tell you any oil had been discovered there?
 - A. I don't know whether he did or not.
- Q. Did he at any time prior to January 1st, 1905, tell you that any oil had been found in the Elk Hills?
- A. Yes—pardon me. Will you repeat the question? (The reporter reads the question.) I don't think he did.

- Q. Did he tell you at any time prior to January 1st, 1905, that he knew of oil in the Elk Hills?
 - A. I don't think he did.
- Q. Did any other oil man tell you so prior to January 1st, 1905?
- A. That is making a pretty hard question for me to answer, because I have heard it talked so generally that I can't call to mind who the dickens it was, because, as I say, it was generally conceded.
 - Q. I know you said that.
- A. And Mr. Treadwell thought it was good territory. Let me ask a question. There is a range of hills immediately across the valley from McKittrick to the north and east. I believe that is a continuation of the Elk Hills.
 - Q. On which side of the railroad?
- A. On the north side of the railroad. The north side where it goes into the hills, and it would be on the east side of Olig Station.
 - Q. What about it?
- A. Mr. Treadwell and I went through those hills and he found some oil sands over there. [157]
 - Q. When was that?
 - A. I found those oil sands there in 1902.
 - Q. Whereabouts?
- A. Probably a mile or a mile and a half north of McKittrick, and probably a mile east. Somewhere along there. It is not very far from what is known as the Sea Breeze Oil Company.
 - Q. And you considered that in the Elk Hills?

- A. In that portion of them I did. If that is a portion of them, I did; if it is not, I didn't.
 - Q. What did he say?
 - A. He thought it was a good proposition.
 - Q. Did he say he knew there was oil there?
 - A. He thought so.
 - Q. Did he say he knew there was?
- A. That is something nobody in God Almighty's world can tell.
- Q. Can you tell me any other oil man prior to January 1st, 1905, who told you that he thought that was good oil territory?
- A. J. B. Treadwell, and lots of men around there who were oil men, but men of no prominence. Several of my men made such remarks, and several others who were drillers and tooldressers who had more or less connection with the oil business.
- Q. But, Mr. Ott, you have made the statement that it was generally conceded by oil men to be good oil territory?
 - A. Yes sir.
- Q. I want you to give me the names of any individual you can think of who ever made any remark to that effect prior to January 1st, 1905. I don't want generalities, but I want specific names.
- A. That is a question that I had not thought of. If I [158] had thought of it I would have set down and studied it over, because several have made remarks, and it was generally known. H. P. Bender who is now deceased, and who was at that time secretary and treasurer of several oil companies, talked a good deal about those hills.

- Q. Was he an experienced oil man?
- A. No, but he was in the oil business.
- Q. Did he know anything about oil?
- A. He knew oil when he saw it.
- Q. I know that myself.
- A. Then you are an oil man.
- Q. I want to know if you can give me the name of any man who was a practical oil man, familiar with the way in which oil occurs and is developed, and not merely connected with some oil company—an experienced oil prospector?
 - A. I heard Charlie Youle.
 - Q. When and Where?
- A. Around McKittrick, when I first went there. I don't know Mr. Youle hardly to speak to him, but I heard him make the remark. He had been doing some work over there, I believe—both he and Mr. Briscoe.
 - Q. What did he say?
 - A. That it was good oil territory.
 - Q. Did he say he knew there was oil in there?
- A. I don't know whether they did at that time or not, but I know there was oil there.
 - Q. You know there is there?
 - A. Yes sir.
 - Q. Did you know in 1901 there was oil there?
 - A. Shortly after that I did.
 - Q. When?
 - A. Along in 1902, I believe. [159]
 - Q. Where did you know it was?
 - A. It was taken from the ground.

- Q. Where?
- A. Through the Sea Breeze well.
- Q. In the Elk Hills?
- A. If that is the Elk Hills, yes sir.
- Q. What direction and distance from McKittrick?
- A. Probably a mile and a half north and a little east. I think that is the course.
 - Q. You don't know the township?
- A. No. I want a map. I want to give those directions to this gentleman as correct as I can. I think the other day he got some that are not correct.
- Q. That is, he got some that didn't jibe with the map?
- A. Because of the confusion more or less of the witness on the stand.
- Q. Did you make any map that you are now calling for?
 - A. No sir.
 - Q. Have you seen any that you are calling for?
 - A. No.
 - Q. Did you see any map?
- A. There was a map hung on the wall. Whether that is the map I can't say.
 - Q. When did they show it to you?
- A. It was last Monday. The map looks something like this, but whether it was I don't know.
 - Q. Just remain seated, Mr. Ott.
- A. All right. The course and distance I am going to give according to the map.
- Q. Have you any recollection where McKittrick is without reference to the map?

- A. It is in California. [160]
- Q. Is that the nearest you can place it?
- A. No; I can go over there and walk there in the dark from here.
- Q. And could you, being in McKittrick,—you are able while there to go to different properties and know what direction they are from the town, are you not?
 - A. Yes sir.
- Q. And know in a general way as any man living in the community does, approximately how far they are?
 - A. Approximately.
- Q. You are familiar with the country so that you say you could go about there in the dark and not get lost?
 - A. Yes sir.
- Q. Then, so far as approximately stating direction and distance from the town of McKittrick of the various properties that you have visited, you can do so without reference to a map?
 - A. If I am there, yes.
- Q. And not being there, you can form a picture in your own mind generally of what direction different places are from McKittrick that are near there?
 - A. Not correctly.
- Q. Are you familiar with the points of the compass?
 - A. I can't always tell where it is.
 - Q. You know where north is?
 - A. Sometimes, and sometimes I don't.

- Q. When you are in your normal state you know where north is?
 - A. I am always normal.
- Q. When you are in a normal state you always know where north is?
 - A. Not directly.
- Q. When you were in McKittrick did you have any doubt [161] where north was?
 - A. Not particularly.
- Q. And likewise you were not in any difficulty as to what was east, west or south, were you?
- A. During the heat of the day I am peculiarly affected. I can't tell the points of the compass, if I have not something to go by. I am not like some old frontiersmen who have been out on the plains all their lives and immediately at 12 o'clock can tell you where due north is or south. I can't do those things.
- Q. When it struck noon at McKittrick if you wanted to know which was north you would have to look at the compass?
- A. Unless I was outside and could see some object that I was familiar with.
- Q. So that without stopping to figure you could tell instantly while in McKittrick which was north?
 - A. Oh, in a general way.
- Q. And the same with the other points of the compass?
- A. Certainly; if I could find north I could find south.
- Q. Where was it from McKittrick as to the direction and distance that Mr. Youle told you about there being oil indications or discoveries?

- A. I will show it to you on the map.
- Q. I wish you would answer me without reference to the map.
 - A. No sir.
 - Q. Can't you do it?
 - A. No sir.
 - Q. Is it necessary for you to refer to the map?
 - A. It is necessary, yes sir.
 - Q. Why?
- A. Because I can't answer you positively and correctly to my satisfaction. [162]
- Q. Now, I am asking you to give me generally the direction from McKittrick that the place was that Mr. Youle referred to. I don't care if you vary a few points of the compass.
- A. Well, sir, if I mistake not, I have certain rights there that I am going to ask for. If I have the right to refuse to answer that question without a map, I will do it; if I have not—
- Q. I don't think you have. Do you claim any privileges?
 - A. I do.
 - Q. Would it tend to incriminate you?
 - A. No sir; I claim the privilege to look at the map.
- Q. Would the answer to the question expose you to humiliation and disgrace?
- A. I can't see why it should. I would be giving my answer to the best of my knowledge and belief.
- Q. And is the direction from McKittrick where Mr. Youle informed you there was oil any informa-

tion that came to you in the way of a privileged communication, a communication to you as confessor or attorney?

A. I am not guilty of any of those charges.

Q. Then you will kindly answer my question.

Mr. Mills—I want to submit that the witness has answered to the best of his information and belief.

A. I want to go to this point, if you please. While I am in McKittrick, I can point out to you any point there is there by taking certain locations. To be away from there, I might give you a wrong direction. And I was here the other day and saw a witness tangled up till he couldn't see straight on that very same point, and I am asking for my rights to straighten that out on this map before I give any positive evidence.

Q. By Mr. Lewers—That is all very well, but I am anxious to have you testify and not the map. So, will you kindly [163] tell me in a general way the direction from the town of McKittrick this oil was discovered by Mr. Youle?

A. In a general way it was northerly.

Q. Was it east of north or west of north?

A. It might have been a little one way or the other, and it might have been due north.

Q. How far was it from McKittrick, approxiately?

A. I expect a couple of miles; a mile and a half or two miles.

Q. And when was that? You don't have to consult a calendar for that?

A. Well, I might. Have you a callendar handy?

- Q. We have none for 1902 or 1901 that I am aware of, so you will have to depend on your recollection.
 - A. That was in 1902 sometime.
 - Q. What did he tell you?
- A. I think that was early in 1902 or the latter part of 1901.
 - Q. What did he tell you?
- A. He simply made the general remark that there was oil there at that point.
- Q. Did he tell you on that occasion or any other occasion prior to January 1st, 1905, that he knew of oil anywhere else in the Elk Hills? Not that he believed there might be, but that he knew of it?
 - A. I don't know that he did.
- Q. You have no recollection of his telling you anything of the kind?
 - A. No sir.
- Q. Now, Mr. Ott, you have given me the names of three persons. Can you give me the name of any other competent oil man? [164]
 - A. A Mr. Briscoe thought there was oil there.
 - Q. When?
- A. Along in the latter part of 1901, I think, or early part of 1902.
 - Q. Where did he say it was?
 - A. The same place.
 - Q. The same place Mr. Youle referred to?
 - A. Yes sir.
- Q. Did he say there was oil anywhere else in the Elk Hills that he knew existed?

- A. I don't know that he did.
- Q. You have no recollection that he did so?
- A. No sir.
- Q. Can you give me the name of any competent oil man who told you prior to January 1st, 1905, that he knew of oil existing in other portions of the Elk Hills lying to the east of the point you have indicated Mr. Youle pointed out?
 - A. You mean actual oil or indications?
 - Q. Oil.
- A. I can't recall any conversation regarding it up to that time.
- Q. Then when you answered that it was the general belief of the oil men that that was oil territory you were referring to the territory near the point where Mr. Youle had pointed out or told you those oil indications were, were you not?
 - A. Not particularly there.
 - Q. What were you referring to?
 - A. That whole range of hills clear down to Sunset.
 - Q. From McKittrick to Sunset?
 - A. Yes sir.
- Q. Were you referring to the range of hills to the north known as the Elk Hills?[165]
- A. Well, they would be on the east side from our lease at South-end, and they ranged on down toward the Sunset.
- Q. That is not the question. I understand you to say that oil men during that time regarded the territory from McKittrick down towards Sunset as being oil territory generally. Is that correct?

- A. Yes sir.
- Q. Did they tell you, any of them,—referring to oil men, now—that the Elk Hills lying to the north and across the Valley from the range of hills leading from McKittrick to Sunset was oil territory?
- A. Lying to the north and across the valley? From where?
 - Q. From McKittrick?
- A. I can't recall any hills lying to the north of McKittrick. The points of the compass as I have them in my mind, it would be northeast of those hills.
 - Q. That is, northeast from the McKittrick hills?
 - A. From McKittrick over to these hills.
 - Q. You are probably right.
 - A. Possibly right.
- Q. I have only been there once. My knowledge of the compass perhaps is mixed. Did they tell you then that this range of hills a little to the east of north of McKittrick, known as the Elk Hills, was oil territory?
- A. Yes sir; I think I said awhile ago to you that they found this oil in the Sea Breeze.
- Q. But outside of that particular place at Sea Breeze did they tell you that any portion of the Elk Hills was oil territory?
- A. I will have to ask you a question before I answer that. Was the Belgian Oil Company considered in the Elk Hills?
- Q. I can't answer. I wish you would answer my question. [166]

- A. If they were, yes. There was some oil there. The Belgian was in 1901. I happen to know that.
 - Q. Were you at their property?
 - A. Yes sir.
 - Q. How far from McKittrick is it?
 - A. Very close by.
 - Q. How far?
 - A. Two miles and a half or three miles.
 - Q. In what direction?
 - A. I think something like southeast.
 - Q. Southeast from McKittrick?
- A. Yes sir; the Belgian Oil Company put in a pipe-line from there.
- Q. Would property two and a half or three or four miles southeast from McKittrick be in the range of hills lying across the valley to the northeast from McKittrick?
- A. I think so. I think it would be a continuation of the same range of hills.
- Q. Now, Mr. Ott, you say that you were employed from the time when you first went in there as superintendent. Was it of the S. P. lease?
- A. The S. P. Railroad Company's property I was told.
 - Q. What were you known as?
 - A. Superintendent.
- Q. And as such you had charge of the operations conducted on the lease, did you?
 - A. Yes sir.
- Q. And that lease was situated close to McKittrick?

A. Yes sir.

Q. And not in the Elk Hills?

A. That is what we call the McKittrick Hills according to my understanding. [167]

Q. Quite a number of miles from the Elk Hills, was it not?

A. Well, no.

Q. How far?

A. I don't think it was over a couple of miles, right across the valley. In fact, I think along around towards the asphalt mines there they connect up with the range of hills there. Where they separated I can't tell you.

Q. Do you know in what section and township this S. P. lease was?

A. It was in—(referring to memorandum)—it was in Township 30-22, Section 20; and I think 29. I can't be sure about that.

Q. You say that lease was leased from the Buena Vista Oil Company. Is that correct?

A. That was always my understanding of it, yes sir.

Q. Who owned the ground?

A. The Buena Vista Oil Company, as far as I know.

Q. Do you know who was president of the Buena Vista Oil Company or in charge at that time?

A. I met the gentleman, but what his name is, I don't know. He was connected, I understand, with a clearing-house in San Francisco. He came there occasionally. I can't recall his name.

Q. And that was known as the S. P. lease or the S. P. Company's lease?

A. It was generally known as the S. P. Raifroad Company.

Q. That is, it was referred to in your correspondence as the S. P. Railroad Company's lease, was it?

A. Yes sir.

Q. And you say that Mr. Harriman came there on one occasion?

A. Yes sir.

Q. And Mr. Harriman held what position? [168]

A. I don't know. It is almost too big for me to name. I think he was president of all the S. P. lines and their connections.

Q. Do you know?

A. Mr. Harriman never told me so individually.

Q. Do you know?

A. As well as I could by reading papers and hearing general conversation as to employees of the railroad company and officers of the company.

Q. Then you had no information except what you picked up by newspapers and general gossip?

A. You can term it that way if you wish.

Q. That is the way it was?

A. You can term it that way.

Q. I don't care to term it.

A. The gossip portion of it, I think it was done in a business way.

Q. While you were superintendent did you ever have any communication with any of the officers of the railroad company?

- A. I did.
- Q. Did you have any stationery for use in connection with your business?
 - A. I did.
 - Q. Have you any of that now?
 - A. I have.
 - Q. Have you any of it with you?
 - A. Not of the S. P., no.
- Q. How was that stationery marked? What was the name of the company printed at the head of it and on the envelope?
- A. If I hadn't heard the testimony here the other day I would have said S. P. Railroad Company, but I don't know whether it was or not [169]
- Q. Having heard that testimony, are you inclined to modify your former answer?
- A. I might modify the form, but not my impression.
- Q. You have already testified very positively that this lease was carried on by the Southern Pacific Railroad Company. What I want to know is how was the stationery marked, Southern Pacific Railroad Company or Southern Pacific Company?
- A. As I stated awhile ago, having seen the stationery, I can't say positively. But my reasons for thinking it was the S. P. Railroad Company was that J. B. Treadwell told me so.
- Q. Are you sure he didn't tell you it was the Southern Pacific Company?
 - A. No sir; he spoke of it as the S. P. Company and

he spoke of it as the Southern Pacific Railroad Company.

Q. I show you Exhibit J and ask you to examine that and state whether or not that envelope is anything like the one you had?

A. Yes sir; I think it is.

Q. Is it the same kind?

A. Yes sir.

Q. That is "Southern Pacific Company?"

A. Yes sir; "Southern Pacific Company, Railroad Business."

Q. I might also ask you to examine the enclosure. Did you ever see anything like that letterhead?

A. I think I have.

Q. That says "Southern Pacific Company?"

A. Yes sir.

Q. That is the kind you had?

A. I think it is identical. I can't see any difference in it.

Q. And it is a fact that the lease was operated by the Southern Pacific Company for the purpose of getting oil to use[170] on the road?

A. You say it is a fact?

Q. Isn't that the fact?

A. I don't care to say that it is the Southern Pacific Company. I was told that it was the Southern Pacific Railroad Company by my immediate superior, no matter what the staionery might read.

Q. The question is: isn't it a fact that the lease was operated for the purpose of getting oil to use

as fuel on engines of the road of the Southern Pacific Company?

- A. Of the Southern Pacific Railroad Company, yes sir.
- Q. Why do you say "The Southern Pacific Railroad Company?"
- A. Because they are operating the Southern Pacific railroad.
- Q. Was the Southern Pacific Railroad Company operating any road at all in 1900 or any time while you were employed over there?
 - A. Were they operating any road?
 - Q. Yes.
 - A. They most undoubtedly were.
 - Q. How do you know they were?
 - A. I have ridden on their trains.
- Q. Did you ever ride on a train operated by the Southern Pacific Railroad Company in your life?
 - A. I think I have, many a time.
- Q. When did you last ride on one operated by the Southern Pacific Railroad Company?
- A. On the night of the 14th of this month and the morning of the 15th.
 - Q. Between what points?
 - A. Between Dome, Arizona, and Los Angeles.
- Q. And you are positive that that was operated by the [171] Southern Pacific Railroad Company?
- A. It wasn't the Southern Pacific Fertilizing Company, I know.
 - Q. And it wasn't the Southern Pacific Company?

- A. It was the railroad company.
- Q. It was not the Southern Pacific Company?
- A. It was the Southern Pacific Railroad Company.
 - Q. You are positive of that?
 - A. Certainly I am.
- Q. Have you in your possession a return trip ticket?
 - A. No sir.
- Q. Have you any ticket of any kind in your possession?
 - A. No sir.
- Q. From what did you draw the conclusion that on this last trip you made in this month you were riding on a train operated by the Southern Pacific Railroad Company as distinguished from the Southern Pacific Company?
- A. Because it is a company that was operating a railroad and nothing else.
 - Q. How do you know that?
 - A. It doesn't operate by itself. I know that.
- Q. The question is how do you know that it is not operated by the Southern Pacific Company?
- A. It may be operated by the Southern Pacific Company, but it is the Southern Pacific Railroad Company. It is simply "McCartey come in," or "come in McCartey."
- Q. Have you ever taken a trip across the state of California and Nevada as far as Ogden or any portion of that distance?

- A. Nevada? No sir.
- Q. Have you ever taken a trip from here to Portland?
 - A. No sir [172]
 - A. No sir.
- Q. Do you know what road is operating across the State of Nevada?
- A. No, I do not. I presume probably the Union Pacific.
- Q. Don't you know the Union Pacific line ends at Ogden?
 - A. No, I do not.
- Q. Did you ever hear of the Central Pacific Railroad?
 - A. I heard of it, yes sir.
 - Q. Where did its line extend?
 - Mr. Mills-Objected to as wholly irrelevant.
 - A. I can't tell you.
- Q. By Mr. Lewers—Have you ever heard whether it had any line at all $\hat{\imath}$

Mr. Mills-Objected to for the same reason.

- A. I think so. There is the Northern Pacific, Union Pacific, Missouri Pacific, and I think there is a Central Pacific.
- Q. By Mr. Lewers-Where is the Central Pacific's line?
 - A. I can't tell you.
 - Q. Did you ever know?
 - A. I may have.
 - Q. Do you know where any portion of it is?
 - A. I can't tell you.

Q. What line runs through Sacramento?

Mr. Mills-Objected to as irrelevant.

A. I can't tell you.

Q. By Mr. Lewers—When were you in Sacramento last?

A. It was before I went to McKittrick a short time to work for the company.

Q. Over what line did you ride in leaving Sacramento?

Mr. Mills-Objected to as irrelevant.

A. I went from Bakersfield on the Southern Pacific on a pass from Julius Kruttschnitt to nearly the most northern [173] boundary of California—Siskiyou County—and return the same way.

Q. How did the pass read? What was on it?

A. It was telegraphic.

Q. What company was it given by?

A. I suppose it was given by the Southern Pacific Railroad Company.

Q. I don't care what you suppose.

A. I care what I suppose, but I am not positive.

Q. I don't want any supposition, but what was the fact?

A. You will have to suppose this, because I don't know. I supposed it was the Southern Pacific Railroad Company.

Q. As a matter of fact, you don't know?

A. Not positively.

Q. Might it not have been the Southern Pacific Company?

A. It might have been the Salt Lake.

Q. Might it not have been the Southern Pacific Company?

A. It might have been and it might have been the Salt Lake.

Q. Was it the Salt Lake?

A. Not that I know of.

Q. And when you answered that it might be the Salt Lake, you knew perfectly well it was not?

A. You are trying to corner me down that it was on the Southern Pacific Company, and I think it was the Southern Pacific Railroad Company.

Q. Will you read the question? (The reporter reads the question.)

A. How could I tell? They may be controlling the Salt Lake and giving passes. I don't know.

Q. When you answered that it might be the Salt Lake Company, you knew perfectly well that the pass you received was not of the Salt Lake Company?

Mr. Mills—We object to that as wholly irrelevant, incompetent and not connected with any of the issues in this case, any more than an inquiry about a rail-road running into Jerusalem.

Mr. Lewers—That may be where the other oil seat is.

Mr. Mills—And I will tell you that if there is any oil there, they will get it.

A. I don't know what company it was.

Q. By Mr. Lewers—you knew it was not the Salt Lake Company that gave you that pass?

A. I don't know whether it was the Salt Lake

Company or the Union Pacific or the Chicago & Alton.

- Q. You don't know that it was the Southern Pacific Railroad Company?
- A. Julius Kruttschnitt telegraphed the pass to the agent and it was simply a telegraphic pass. What it was, I don't know.
 - Q. Wasn't it on a railroad message blank?
 - A. It probably was.
 - Q. How was that marked?
 - A. I don't know.
 - Q. Salt Lake road?
- A. I don't know. It might have been. I don't know.
- Q. As a matter of fact you don't know what company is operating the road from Bakersfield to Sacramento?
- A. I went up in the interest of the Southern Pacific Railroad Company.
- Q. I don't care whether you went in the interest of something else. I want to know if you know what company operates that road?
 - A. The Southern Pacific Railroad Company.
 - Q. You know that ? [175]
 - A. That always was my impression of it.
- Q. And was that telegraph blank marked "Southern Pacific Railroad Company?"
- A. Since I see a letterhead, I don't know whether it was or not. If I had not seen that, I would have thought it was.

- Q. Did you report as superintendent to Mr. Jerome Madden?
 - A. I never met the gentleman.
- Q. Did you ever have any communication from him?
 - A. I never did.
- Q. Did you ever report as superintendent to C. W. Eberlein?
 - A. I never did.
- Q. Or did you have any communications from him?
 - A. I never did.
- Q. When you come down to it, you don't know whether it was the Southern Pacific Company or the Southern Pacific Railroad Company, do you?
- A. I was told by my superior, who was supposed to know, that it was the Southern Pacific Railroad Company; that was when I was employed there, during various conversations.
- Q. You say Mr. Owen gave you a letter from Mr. Kruttschnitt. Is that correct?
 - A. Yes sir.
 - Q. And you don't know where that letter is now?
- A. No sir. I think I handed the letter back to Mr. Owen to hand to my bookkeeper.
 - Q. What was the heading of that letter?
 - A. I can't say.
- Q. Was it the Southern Pacific Company or Southern Pacific Railroad Company?
- A. I can't say. I suppose coming from Mr. Kruttschnitt, it would be from his office.

- Q. Which company? [176]
- A. The Southern Pacific Railroad Company.
- Q. Has Mr. Kruttschnitt ever had any official connection to your knowledge with the Southern Pacific Railroad Company?
 - A. I think so.
- Q. Do you know that he has, as distinguished from the Southern Pacific Company?
- A. I don't know. I don't know whether there was one in existence.
- Q. Although you admit that the letterhead which you had in your possession was probably the same as the Exhibit J?
 - A. Yes sir.
- Q. Never directed your attention that there was such a company as the Southern Pacific Company?
 - A. No; I didn't give it a thought.
- Q. And I don't suppose that you ever observed the inscription upon the engines or upon the cars running upon the lines into McKittrick to see whether that was Southern Pacific Company or Southern Pacific Railroad Company?
- A. I probably noticed it, but I didn't give it any thought. I have seen a great many of the Sunset Route, Southern Pacific Railroad Company.
 - Q. Did you ever see any other mark?
- A. I don't believe that I ever saw one of them anything outside of "S. P." on the locomotives, and I think it is "S. P." on the oil cars. I am not sure.
 - Q. It is "S. P. Co.", is it not?
- A. I don't know whether "Co." is there or not. I have seen thousands of cars, but I can't tell you.

Q. Hasn't that attracted your attention,—that they left off the "Railroad Company"?

A. No sir. It is the Southern Pacific Railroad Company in my mind the same as anybody else. [177]

Q. Then that is the real thing in your mind, that you never noticed any such distinction between "Southern Pacific Company" and "Southern Pacific Railroad Company"?

Mr. Mills—How long will you continue to ask this line of questions? The questions for the last half hour have been wholly irrelevant. I don't think you should encumber the record with twenty or thirty pages of it.

- A. I never noticed that there was any distinction.
- Q. By Mr. Lewers—You are not aware that there ever was such a distinction?
 - A. No, I never was aware.
- Q. And it might have been the Southern Pacific Company that you referred to?
- A. I went to work and was authorized by J. B. Treadwell to go to work for the Southern Pacific Railroad Company. That is who I was employed by, to work for the Southern Pacific Railroad Company. I went to McKittrick and went to work for this Company and they paid me.
- Q. You are paid by the Southern Pacific Railroad Company?
- A. Paid by the company Mr. Treadwell employed me for.
- Q. Are you paid by the Southern Pacific Company or by the Southern Pacific Railroad Company?
 - A. It was the railroad company.

- Q. Have you any literature in your possession showing that to be the fact?
 - A. No.
- Q. Might it not have been the Southern Pacific Company that paid you?
- A. They might have termed themselves that way on their literature.
- Q. Might not they have termed themselves so on their vouchers? [178]
- A. I can't say. But my vouchers, if I remember correctly, were all made out against the S. P. Railroad Company for the drilling. I made up my own vouchers.
 - Q. What did you do with them?
- A. They were made out in triplicate, I believe, and sent to the Kern River field to the head office, and from there they went through the regular routine at Frisco, and my money was sent to me. I very seldom drew the vouchers. I generally gave the bank at Bakersfield authority to handle it.
- Q. And you are very positive that those were in the name of the Southern Pacific Railroad Company?
- A. I am pretty sure that I made out my own vouchers against the Southern Pacific Railroad Company.
- Q. You are just as positive of that as any other testimony that you have given?
 - A. I think so.
 - Mr. Lewis-That is all. [179]
- I. N. CHAPMAN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am seventy-four years of age and am a Civil Engineer. I commenced to take contracts for government surveying along in the sixties, I think about sixty-seven. I have continuously followed that business since that date, not always in the government's employ but I have had many government contracts for public survey. At present I am City Engineer of Alameda, California. I can't tell how many government contracts I have had for the survey of government lands but I was in that business many years taking contracts one or two each year. Sometimes they would last for two years or more. I have often been employed to go and examine tracts of land and to classify them in reference to soil and valuations. During my work as a surveyor I have classified many acres of land, amongst which were mineral lands. I have surveyed land in different districts of California for mineral lands or supposed to be mineral lands. My work extended into the County of Tuolumme on the mother lode. I have done work in Eldorado County on the mineral belts. I have also examined mineral lands in Placer County. I have done no special work in surveying oil lands but I have surveyed a good deal of land around where there was supposed to be oil lands and I recognized it as such as it had the proper formation for oil. I did some work over in the oil region in Santa Barbara County. I surveyed Sisquoc lands on the Sisquoc River about twelve miles along the river and about six miles wide. I regarded it as oil formation, sandstone and shale

and mineral seepages all over the land. At that time the country had not been developed for oil. My employer owned the ranch and I told him it was particularly adapted to oil rather than stock raising. Since that time that land has been developed and they have some [180] very fine flowing wells over in that country. I have been in the Bakersfield and Mc-Kittrick country and the Sunset several times. In informing myself of the mineral classifications of lands I made a study of formations. I have studied geology. I surveyed the East boundary of Township 30 South, Range 23 East. That was the West boundary of 30 South, 24 East. I think I surveyed in Range 24 and in doing that work I fixed the boundary limits, the Eastern boundary limits of Township South, Range 23 East. This work was done about 1893. When I made that survey, as I remember it. the character of the ground was plainly a sandstone base and it was pretty rough as to topography and very gulchy. There was not much vegetation on it of any kind and no timber. It was a sandstone and shale formation as I remember it. I regard it, from what I have known before and since that, that it was very probably oil land. That was true of the hills there known as the Elk Hills and clear over into the Carisa plains. It is all the right formation to find oil. At the time I made that survey in 1893 I regarded the Elk Hills, and by that I mean the group of hills in which I completed that survey, as oil lands. did not go any further West at that time but subsequently I went over there to make an examination of

the lands in the Carisa plains. The Elk Hills were rolling hills and pretty well chopped up and did not seem to be very valuable for agriculture. They were dry and parched at the time I was there. I think their elevation was about seven or eight hundred feet. I would certainly think that that country there was more valuable for oil than anything else.

CROSS EXAMINATION OF I. N. CHAPMAN.

There wasn't any vegetation there when I was there [181] for sheep or anything else. I didn't remember seeing any bunch grass. I think there is grass in there in the spring of the year. There are times when there is some vegetation towards the summit of the mountain next to Carisa. I didn't see any break in the Elk Hills but the proper formation for oil is there. I am pretty certain I did not report the territory on the East side of Township 30 South, Range 23 East, as oil land. I spoke to the United States Surveyor General about the probability of oil and he advised me not to mention it because it was a difficult matter to prove. When I went down and made the survey on the East line of the township it impressed me as ground that probably might contain oil. I talked it over with my men there at that time and told them that I believed there would be oil discovered in that country and that there would be a great boom in oil. I made no estimate or sufficient examination of the territory to determine the probable depth of that oil. I talked about it being probably a formation to look for cil in but as to what depth it would be I know nothing about it. I thought it was a place that would bear investigation. I knew it was an oil formation from experience I had had in other places. It is a kind of gamble when you look for mineral anywhere because you have to find it. From such indications as I saw there a man would not be justified in denying that there was oil there because a man would not bore where the surface indications were not there. He would be governed by surface indications. I couldn't say that a man would be justified in saying that from what he observed as to surface indications that the land contained oil in paying quantities.

RE-DIRECT EXAMINATION OF

I. N. CHAPMAN. [182]

By Mr. Mills:

Q. Would he be justified upon such indications to invest money with the reasonable expectation of getting oil?

A. Certainly he would. He would be justified in making investigations, but he would not be justified in making investigations for oil where he did not have the indications.

Mr. Hills-That is all.

SAMUEL P. WIBLE, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am forty-nine years of age and reside at Bakers-

field, California. I am in the Real Estate Business in Kern County, California. My brother was president of the Bank of Bakersfield and while he was away in Alaska I tended to his business for him. I have lived in Kern County eighteen years and have dealt quite extensively in lands there. I know what is called the Elk Hills just East of McKittrick. I first saw those hills in the Fall of 1893. I had a brother on Miller and Lux's ranch which lies along the canal North of Elk Hills. He was there in 1873. Buena Vista Lake butts right up against the Easterly end of Elk Hills. I became interested in the oil business in Kern County about the year 1898 or 1899. I drilled wells East of the Kern River field. Later on I went to McKittrick and Temblor and drilled out land. We drilled a number of wells in the McKittrick district West of the town. I had charge of the drilling of seven or eight wells there. There was quite a boom there in 1900 and 1901. The boom included the country from the Temblor to Sunset. The land was located as far East as the Buena Vista Lake but there was no development attempted much. During that excitement land was located in Elk Hills. I think the whole of the Elk Hills was located [183] at that time. The Buena Vista hills lying South of the Elk Hills were also located. I did not go into the Elk Hills at that time to examine the territory but I went there sometime in the year 1902. I went there to examine them and investigate their oil possibilities. I heard that there was a seepage there but I didn't know just where it was but I saw it afterwards. It was on Sec-

tion 32, Township 30 South, Range 24 East. It is not what you call an oil seepage; it is what you would call a brea bed. Evidently oil or gas had been in it at one time and dried out at the present time. I was examining the land for myself. At that time I didn't have any particular associates. After that the gentlemen who went in with me were: Charles Haperkern, H. T. Tupman, J. Owen, T. S. Klipstein, W. E. Richardson and E. W. McCutcheon. In 1903 or 4 I went through those hills with Mr. Owen. We drove around through the Easterly part of the Elk Hills. He was going to show me the outcrop but we were not able to find it at that time. He said that he would come into the outcrop from the South side of the hills and when he went in from the North side he was not able to locate it. He had been in there before he took me in. We spent a couple of hours looking for this oil showing. Mr. Owen was a geologist for the Southern Pacific Railroad. He informed me that he was and I knew that fact before I went into the hills with him. He was examining and classifying Southern Pacific Railroad land. I observed that he was engaged in going around the country in the vicinity of McKittrick from time to time examining lands. He was there for a year or more. He knew about oil formations. He seemed to be very well posted. He examined practically all the Railroad lands in Kern County and in the Coalinga fields, classifying them. He had examined lands in the Elk Hills in behalf of the Southern Pacific Railroad Company. He first went in there in the Fall of 1901 or the Spring of 1902. The Elk Hills,

from my knowledge, [184] embrace Township 30 South, Range 23 East. All the South half of Township 30 South, Range 22 East, lies in the Elk Hills right over the crest and West of the oil croppings in Section 32 of Township 30 South, Range 24 East. Mr. Owen was a man about sixty or sixty-five years of age at that time. When he and I went into the Elk Hills we went through Township 31 South, 25 East, and Township 30 South, 24 East. We were also along the East line of Township 30 South, Range 23 East. At that time there were no roads from McKittrick into the Elk Hills; we had a team take us out through the hills and then we walked. The Elk Hills are about fifteen miles long and six or seven miles wide. They can be plainly seen from the McKittrick fields. I have discussed with Mr. Owen the geological conditions and oil possibilities of lands in the vicinity of McKittrick. We discussed lands there and formations a great deal. He was very familiar with the formations of that country and particularly with reference to the Elk Hills including Township 30 South, Range 23 East, as well as the other townships there. He told me that he believed the oil measures lay under the Buena Vista Hills and that he thought they lay very deep under the Elk Hills, There is an anti-cline running Northwest and Southeast through the Elk Hills. It can be found in a number of sections just North of the apex of the hills in the canyons. I should say it could be found in a dozen different places just North of the crest of the Hills. There is a very well defined anti-cline in Section 14, Township 30 South, Range 22

East, just at the Northwest end of the Elk Hills where the railroad goes through a gap and this is a continuation of the anti-cline running Northwest and Southeast through the Elk Hills. This anti-cline can be followed over the hills to the Southeast. Mr. Owen was acquainted with that anti-cline. He knew of it before I went into the hills with him and I discussed it with him. I did not know of any other oil evidences in the way of outcroppings in [185] what is commonly called the Elk Hills but there is a decided oil showing in what I would call the North extension of the Elk Hills. It is beyond the railroad tracks to the West. The evidence consists of oil sandcrops in a number of places. As early as 1901 and before 1904 there were two oil wells on section 6 in Township 30, South, Range 22 East, and there was one on fractional section 1, Township 30 South, Range 22 East. These wells were on the same anticline; the one I refer to on the Elk Hills. When Mr. Owen came in there he asked me if I knew anything about the showing about there and I told him where he would find the croppings. I mean croppings on the West end of the hills West of the railroad. He afterwards told me that he had found the croppings that I referred to and found others further east. That was in the Fall, I think, of 1901, or the Spring of 1902. Mr. Owen, before 1904, spoke several times about the oil showing in section 32, Township 30 South, Range 24 East. From a conversation concerning the Elk Hills as oil territory I know he regarded them as such. That would include Town-

ship 30 South, Range 23 East. He seemed to feel quite sure that there were oil lands in the vicinity of those oil croppings on Section 32, Township 30 South, Range 24 East. The formation of the lands in Township 30 South, Range 23 East, and 30 South, 24 East, consisted of shale, sandstone and clay and Fuller's earth and gypsum. Gypsum is scattered there and there is a large body of Fuller's earth in Township 30 South, Range 23 East, and 30 South Range 24 East, and some in Township 31 South, Range 24 East. It is in quantity and quality to make it of commercial value. Mr. Owen knew of the existence of those minerals as he showed them to me. That was in 1903, I think. In that formation Fuller's earth and gypsum generally occur in conjunction with oil. Mr. Owen thought that the oil formation dipped very fast from the West towards the East so as to make [186] it deeper in the Easterly end of the field. If Mr. Owen heard of any oil seeps he hunted them up. That was one of the main things he was looking after when I first met him. He carried maps or plats of the different townships in the Elk Hills and elsewhere. He put down on those plats or maps information that he obtained with reference to the mineral character of the land. We discussed other lands not in the Elk Hills but in the vicinity pretty thoroughly. I was particularly acquainted with Mr. Owen. I was very intimately acquainted with him from 1902 down to the date of his death. I did not know if Mr. Owen was geologist for any other company except the Southern Pacific Railroad Company.

He took charge of the Kern Trading and Oil Company when it was formed. That was later on. They were operating on lands belonging to the Southern Pacific Railroad Company prior to 1904. I think they were organized several years after I met Mr. Owen. At the time that they were organized he was in their employ as a geologist. He started in to locate their wells for them and later on took charge of the drilling operations. I know the Southern Pacific Railroad would withdraw lands from the market upon report of the mineral character thereof by Mr. Owen. Mr. Owen told me it was his business to examine lands and report or price them and have them withdrawn. On the maps I have mentioned Mr. Owen generally colored the railroad sections that were mineral lands. He wouldn't indicate the presence of oil on the map in any way especially, but for the mineral character he colored them all the same. I was in the Eight Oil Company. At its organization it was composed of myself, Mr. Klipstein, H. T. Tupman, E. W. McCutcheon, J. Owen, W. E. Richardson. Charles Haperkern and my wife. When the Eight Oil Company was organized they had lands in Township 30 South, Range 24 East, on the even numbered sections. Some of the people that were interested in the Eight Oil Company had some lands in Township 30 South, Range [187] 23 East. They were myself, Mr. Haperkern, Mr. Tupman and Mr. Richardson. Mr. Owen, the geologist of the Southern Pacific Railroad Company, had eight thousand shares of stock in the Eight Oil Company, the capital stock of which was

forty thousand shares of the par value of one dollar a share. Mr. Owen furnished information of the geological character of the holdings of the Eight Oil Company to that Company. He showed several of us the fuller's earth and gypsum there and told us that it was possible that the old measures lay under there at a depth that could be reached. At that time we didn't think it was possible at the depth that he stated, to drill profitably for oil. We had confidence in his report so far as the existence of minerals on those lands was concerned. Mr. Owen put up his share of the money for doing the development we did there and the locations of the land and the organization of the Company. Those lands were located for oil, fuller's earth and gypsum and other minerals. The lands in Township 30 South, Range 23 East have absolutely no value for agricultural purposes as they are too hilly to be cultivated and there is not enough level land to do anything with. There is no vegetation that grows the year around on those lands but it has some value for pasture in the Spring of the year as there is some bunch grass and filaree that grows there at that time but it was only in a good season that there was any pasturage. The value of that land is for mineral. That land rents for Fifteen or Seventeen Dollars a section. That is what Miller and Lux pay for the rent of the railroad land. Just about the time of the selection of those lands by the Railroad, about 1904, the same lying in Township 30 South, Range 23 East, I discussed those lands with Mr. Owen. We were at that time discussing the mineral probability of the hills for fuller's earth especially. That is the time that he showed me the fuller's earth. He said if the Railroad selected those lands they would be selecting mineral lands. In other words, they had no right to select them as he had reported them as mineral land. [188]

CROSS EXAMINATION OF SAMUEL P. WIBLE.

Those lands were selected by the Railroad in 1904. I know it because I looked at the records in Visalia several years after they were selected and that was the first time I learned when they were selected. Mr. Owen in 1904 did not say that they were selected at that time. He made this remark to me when we were going over the lands and discussing the lands in the Elk Hills. The remark was made on the road between Elk Hills and Headquarters Ranch. No one was present but Mr. Owen and myself and he stated to me that he had reported these lands as mineral lands. At the time of this conversation those lands had been surveyed but the Government had not yet accepted the survey. At least that was my understanding of it. I am quite sure this conversation took place in 1904. The survey had been accepted at the local office and I think it was held up in San Francisco somewhere. I looked it up one day. My dates might be a little off as to the survey but it had not been accepted by the Secretary of the Interior according to my recollection. I think I only made two

trips into the Elk Hills with Mr. Owen. They were made in 1903 and 1904. I think. I think the second trip was made about six months after the first; that was the best of my recollection. This conversation might have occurred in 1903 although I am pretty sure it was in 1904 and this conversation did take place on my second trip with Mr. Owen into that territory. Mr. Owen stated that if those lands were selected by the Railroad they would be selecting mineral lands. I don't think he knew at that time whether they had been or would be selected. I don't think he told me he had anything to do with their selection. He was employed by the Southern Pacific Railroad Company. He told me so. He said he was employed for the purpose of examining the lands and classifying them as to their mineral character and to price them for sale and either to withdraw them or set a price on them and to [189] designate the character of the land. I can't tell you what date he told me that because we discussed a great many things together. We got to be quite well acquainted there in the Fall. I know of no such Company as the Southern Pacific Company. The Southern Pacific Railroad Company is the only one that I know of. I have just lately heard of the Southern Pacific Company. I know of a lease in the McKittrick country known as the Southern Pacific lease, both the South-end and North-end. He had charge of the production of those leases along about 1906 or 1907. They were being operated, I understood, at that time by the Southern Pacific Railroad Company. That the oil was used as fuel on the engines of the Railroad and the lease was

operated for the development of oil for fuel and was used by the Company operating the road and the employees of that Company had charge of the lease. I have very good reasons for my conclusion that when Mr. Owen was in charge of these leases he was in the employ of the Southern Pacific Railroad Company. I have drawn my conclusion from good information. He never told me that he was employed to pass upon the character of the land that the Southern Pacific Railroad Company expected to ask to have patented. Mr. Owen was associated with me and others, I think, about 1907 in a location in the Elk Hills in Township 30 South, Range 24 East, in the Southerly half of that Township and sections 26, 28, 30, 32 and 34. all even numbered sections. In 1900 and 1901 there was considerable oil excitement in that country and land was located without any knowledge of mineral character. They located everything that was vacant. As a man of experience in the oil fields I would not make a location of land which had no indication of mineral value on the ground at that time. The mere fact of a location is no criterion as to the mineral value. In 1900 and 1901 locations were made on lands that subsequently developed to have nothing in them whatever. At that date the whole country was [190] wild there. You could hear talk amongst oil promoters and prospectors about oil being found anywhere and of indications showing immense values at any old place. You cannot determine whether particular territory contains oil until you develop it. The indications on the surface, such as gas, blow-outs, brea or oil sands,

do not always show that there is a producing bed below that. The presence of brea, or oil sand or gas or blow-outs is only an indication. I have had some experience in lode mining and frequently promising indications do not pan out at all and that is true in the oil business. Mr. Owen said he believed the Elk Hills might contain oil. He said the oil measures lay under them and he thought that they were probably so deep they couldn't be reached and made to pay. I had some conversation with him with reference to some land in Township 30 South, Range 23 East, in which he told me that oil could be reached at three thousand feet or over and we didn't drill because we didn't figure that it would pay to drill for it. At that time there were no such wells drilled in the country to that depth. If we had been told at that time that we had to drill to a depth of three thousand feet where we would strike oil we would have regarded it as prohibitive from a standpoint of cost. Mr. Owen said that there was a good chance. We never drilled there. The Associated Oil Company has drilled on sections 24 and 26 in Township 30 South, Range 23 East. On one of these sections they have gone to a depth of four thousand feet. At that time I would have regarded this depth as absolutely prohibitive. At a number of places through the Elk Hills running from Northwest to Southeast I found evidence of an anti-cline. There are two on the East part of it and one on the West. I have heard it said, although I have never been able to trace it, that there are evidences of the two at the West and that they come together at the East. I know what an anti-cline is. I found both

slopes of the [191] Anti-cline running through the Elk Hills. Both slopes are revealed in those canyons and are very well defined. The North slope is the best defined. I found probably twelve or fifteen indications of stratification showing the North slope of that anti-cline. I did not find the South slope in so many points but where you find the North slope you can find the South slope. I never went in there to find the anti-cline particularly but I noticed it as I was going through. I am certain that I found stratification showing the South flank of the anti-cline. The South anti-cline was quite plain in section 30 of Township 30 South, Range 24 East, and you can find indications of that South slope of the anti-cline in section 32, Township 30 South, Range 24 East, where I found this blow-out. You find the formation dipping to the South and to the North. The thickness of a section of the stratification revealed on the South side was probably fifty feet. That line of stratification dips to the Southwest. The materials shown in these strata is sandy clay and fuller's-earth. fuller's-earth strata shows very prominently. When I first went to McKittrick I was engaged principally in the laundry business until I sold out in 1901. I then went into the oil business and farmed South of Bakersfield. I met Mr. Owen frequently on the train going in and out to Bakersfield. I was not with him on all the trips he made through that country. He went a great many places without my being with him. I don't pretend to be able to say what he was doing on these trips, only what he told me and I was not with him so as to observe what he was putting down

on those maps I referred to. I made but two trips with him into the Elk Hills. At that time we didn't see any blow-outs and it was a year or two later that I found the blow-out. I don't think I made over four or five trips with Mr. Owen in the field although I met him frequently on the train. I have sold four or five tons of fuller's-earth at Fifteen Dollars a ton from our location in [192] Township 30 South, Range 24 East. We have a location also in Township 30 South, Range 23 East, but we never sold any fuller'searth from it. We have had it tested and find it valuable commercially. It lies on the ground in strata with soft material over-lying it and you have to remove this material in order to get the fuller's-earth. It is not a very expensive process to get it out as you can get lots of it out without removing very much covering as it is not covered very deep. It is quoted in San Francisco from twenty to thirty dollars a ton depending on the purity. I think we could get it out and haul it to the mill for a dollar and a half to two dollars a ton, and it costs about a dollar a ton to refine it, the total cost being not to exceed four dollars a ton. I was never employed by Mr. Owen or anyone else in connection with the oil properties of the Southern Pacific Company, Mr. Owen, when he took charge of the Kern Trading and Oil Company, was employed under Charles W. Eberlein. He worked under instructions from Eberlein. He came with a letter from Mr. Eberlein with instructions to tell me to stop work on the land. I think that was in 1907 or '8 but not prior to January 1, 1905. Mr. Owen never did tell me he was employed under C. W. Eberlein.

I was very intimately acquainted with Mr. Owen. He never told me about reporting to Mr. C. W. Eberlein but he reported to Mr. E. T. Dumble. I saw Mr. E. T. Dumble in a number of places in the field prior to 1905. He was with Mr. Owen. I know about the Government lands in the Elk Hills being withdrawn from entry or location in 1909 by the United States Land Office in Washington and I discussed it with Mr. Owen. I heard of the Buena Vista Hills being withdrawn in 1900 but I can't say whether the Elk Hills were included in that or not. I heard of the Cancellation of that withdrawal order. I think it was about 1902 or 1903. There was a special agent of the General Land Office from Washington examining that land between the time of the withdrawal order of 1900 and the cancellation of that order in 1903. I saw [193] that special agent at McKittrick and in Bakersfield. He was in and out of the vicinity of McKittrick three or four years and I heard that as a result of his report the withdrawal order had been cancelled. At that time I knew very little about the Elk Hills. Prior to January 1, 1905, the chief activity in the development and production of oil was right in the immediate vicinity of McKittrick and West of it. It did not extend much North. The attention of practical oil prospectors was devoted more to the territory around McKittrick and to the West of McKittrick and leading down towards Sunset. They didn't go across the valley to the North as that was not territory which at that time attracted practical oil men.

RE-DIRECT EXAMINATION OF SAMUEL P. WIBLE.

Speaking of the conditions of the land as to being covered with locations in that territory during that stampede in the early part of 1900 and 1901 I didn't say that none of those locations were made upon good evidences of oil. There were locations that I know of which were made by parties other than those who were merely speculating on the possibilities of oil. Most of the operations were carried on under the advice of a geologist and I considered Owen one of the best in the field. All of our locations were made on the advice of competent men. Among the competent men to whom I refer were Mr. Treadwell and Mr. Youle. We went under their advice in 1904. The deepest well in that vicinity was a little over two thousand feet. There was no limit to the depth of wells that could be drilled in that vicinity that I know of. It was the general custom of oil men to drill until they got oil then quit and generally they got oil under shallow depth and did not attempt to go deeper. There [194] had been no drilling in the deep territory in the Elk Hills at that time except this deep well that was a little over two thousand feet which was not in the Elk Hills but was in the Northwesterly extension of the hills. I do not know the limit of the depth to which a well could be drilled in 1904 and made profitable. The depth they could drill would depend largely on the formation you had to go through. I don't know of any limits now placed on

the depth of an oil well. They keep going a little deeper every year. The well drilled by the Associated Oil Company on section 24, in Township 30 South, Range 23 East, went to a depth of thirty-two hundred feet and the one on section 26, Township 30 South. Range 23 East, according to my information, went a little over four thousand feet. The well on section 26 produced oil. In drilling these wells they used a standard rig and a rotary rig. I don't know if the well on section 26 was a paying well. The well on section 24 never produced any oil. It might if they would open it up. They have the oil shut off in the casing. There was a contest made over section 16 in Township 30 South, Range 23 East, by a man of the name of Joe Randall who was an agricultural entryman. He attempted to raise a crop there. It was the best year for moisture that I have ever seen in the Elk Hills. I don't know whether he got a crop. I didn't see it after it ripened but I saw it after it began to ripen and it was a very small crop. There was some barley that would have made a little hav. There would be no possibility for Joe Randall or anyone else to raise a crop on that section this year or any ordinary year. Other than Mr. Owen telling me that he was an employee of the Southern Pacific Railroad Company I have seen documentary evidence in his possession. I saw his pass issued to him by the Southern Pacific Railroad and it read: "Chief Geologist of the Southern Pacific Railroad." From 1903 to 1908 the oil business in the McKittrick vicinity was very dull and there was practically [195] no new developments on account of the price of oil and

lack of facilities for getting rid of it. It was only once in a while you could get cars and for that reason you couldn't contract for the oil. The activity stopped almost entirely. The lowest I know of oil being sold for at that time was Eleven cents a barrel.

RE-CROSS EXAMINATION OF SAMUEL P. WIBLE.

It sold for eleven cents, I think, in 1903, but in 1904 I think we got fifteen cents a barrel for what we could sell. Some locations were made in 1900 and 1901 during the time of the great rush under the advice of competent geologists. None were made at that time that I know of in the Elk Hills under the advice of competent geologists. I saw Mr. Owen riding on that pass on the branch line between Mc-Kittrick and Bakersfield and the Conductor accepted the pass. I don't think I could be mistaken about the name of the Railroad Company that was on that pass. I would modify my statement, that the unsurveved portions of the land was of no value for there is some land in Township 30 South, Range 23 East, which, if there was water put on it would be valuable enough to grow some crops. It is also worth something for grazing but very little. I have seen cattle on there but I have never seen any sheep in there. [196].

CHARLES BRISCO, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I reside in McKittrick. I have been living there a

little over a year. I first went to McKittrick in 1897 or '8 and I remained there until August, 1904. I know about the oil seepages or oil indications in and about the town of McKittrick and the hills there Those indications consisted of oil running out of the ground and seeping and gas pockets and places where the gas was bubbling up. When it would rain the gas would bubble up and oil would run out down the hill. I guess I noticed this around there in a hundred places. I also noticed evidence of waste of oil there in former times. There was what we called a Tar Flat. We never did anything with that Tar Flat because in the summer time you could hardly get across it and dogs and squirrels and everything would get stuck in it. This Tar Flat was about a half mile South and East of McKittrick. I have been engaged in the business of prospecting, mining and developing oil in the vicinity of McKittrick. That is what I went in there for. When I first went in there I drilled for a Company called the Shale Basin. I worked for them three or four months and I also worked for other people. I found a small brea beddried oil-dried asphaltum-there in the Elk Hills but I don't remember seeing any in Buena Vista Hills. I found this in the East slope of the Elk Hills about twelve or fifteen miles South and East of Mc-Kittrick. This was about 1901 or 1902. It may have been earlier than that. I never heard of it before I found it but I reported my discovery to several people. Before 1904 I took a man by the name of Owen, who was a mineralogist for the Southern Pacific, over to this brea bed that I found in the Elk Hills. At that

time I was engaged with my wife in running the hotel at McKittrick and I got acquainted [197] with Mr. Owen around the hotel. He was there on and off. I would say, three months at a time but not all the time; he was just back and forth. I think that was in 1903. When I told him about my discovery in the Elk Hills he wanted to know if I could take him to it and I did. In going there we went five or six miles South of McKittrick and a little East to a corner stake. I have forgotten what section that was but it was staked there and it was right on the back bone of the ridge that would run over into the Elk Hills and it was easier to go up in that place than any other place. We followed that road right up there until we got on the summit and then we followed the summit maybe a mile. Then we went upon the summit into a big range of Blue Hills that were there and we followed that right along down until I got down into the canyon that lead into that brea. Mr. Owen, who was with me, was on one side of the hill back and We worked our way through. We didn't forth. take any regular road as he was looking the ground over as we went and so was I. In my judgment he made a careful observation and examination of the lands as we passed through them. We kept right on down those ridges and we followed those ranges down until we came to the brea bed as I knew where it was. We found it and I showed it to Mr. Owen. This brea bed consisted of dry dirt and asphaltum all mixed together, the same as any brea is composed of, as far as I know, or as near as I could explain it. It would burn as we tried it. I lit it. We were out one night

on that trip. We made our camp that night where there was a little divide between the Elk Hills. I think it was pretty near the South end of the hills. It was on the South side of the hills. After that time I knew what Mr. Owen's business was as he told me. He was an expert experting the territory there as a mineralogist for the S. P. At the time that Mr. Owen and I were traversing the Elk Hills he told me it was good oil territory. When he said that he was referring to a [198] certain slope of ground that was in the hills. If I remember right he said that he thought that would be the best territory of any of it but would be very deep. I don't know whether that conversation was on that trip as we had several conversations in regard to it. These conversations were before I left in August, 1904, as I have not seen Mr. Owen since. On that trip Mr. Owen took samples of shale or sand of the different sections we traversed. I don't know how many samples he did take but he had four or five little sacks. I think he kept each sample in a sack by itself and I think he tagged the sack. Within the last few months I went over that route that I took with Professor Owen in order to determine where I went with him. This last trip was in company with Oskar Martin, a government agent on mineralogy. In making that trip with Mr. Martin I pointed out to him the nearest I could the trip I took with Professor Owen in 1903. From the ground which I traversed with Mr. Martin I could see the lands which I visited in 1903 on that trip with Professor Owen. When I was with Martin I showed him all along where Owen and I went down to where

that asphaltum was. Mr. Martin made notes as we went along to identify the places to which we went. Mr. Cwen referred to the character of the oil which would be produced in the Elk Hills. He said he thought it would be better as it would be deeper and there would be more gases in it. By that I mean that the oil would be lighter. Professor Owen told me that the team we used on that trip was the Southern Pacific's team. I know Mr. J. B. Treadwell. He operated in that country before I went on that trip with Mr. Owen. He was the Superintendent there for the Southern Pacific and during that period he brought in quite a lot of wells, I should say ten or fifteen. He told me that he had charge of the oil business in that part of the territory at that time-that division I think he called it. I remember the oil rush in 1901, 2, 3 and 4. I think the country [199] at that time was pretty well located and there was considerable excitement. I was not personally acquainted with E. T. Dumble. I heard that he was with the Southern Pacific and that he had control of the wells a great deal then and worked in conjunction with Mr. Treadwell. He and Treadwell were out in the fields a great deal together looking over the territory to see what it was good for. I met them several times. On three different occasions I showed Mr. Owen lands in the vicinity of that field which he regarded as valuable for oil. There was a depression in the oil business in McKittrick I think, in 1901, 2 and 3 and it continued a year or two after I went away from there in 1904. During the time that I was there I was actively engaged in the business of prospecting and development. The cause of the depression was our inability to get rid of our oil. We couldn't sell and we couldn't get it out of the field because there were no facilities for transportation. We would order cars but we couldn't get them. I know that on my recent trip with Mr. Martin that I pointed out to him substantially the road taken by me and Professor Owen on the occasion that I mentioned.

CROSS EXAMINATION OF CHARLES BRISCO.

I applied to J. B. Treadwell for cars and he said he didn't have any. If we had had cars at times we would have had a market for our oils. I don't think the depression was due to a lack of market. Our company claimed that they had sale for the oil but we couldn't get it to the market. I had charge of the shipping for awhile. I knew that cars were loaded but I don't know who they were loaded for. This car shortage was quite general. I think the oil excitement in that district ceased about 1901. That is, the rush of the locations and so on. During that [200] excitement people located anything they could get on to whether it had a surface showing or not and a great many of those locations never had any work done on them at all. Mr. Owen told me he was experting territory as Mineralogist for the S. P. He told me that on several occasions in 1903. He was not a very talkative man about his business. Was rather secretive and would not talk much to those with whom he was not intimate. There is no asphaltum at the place in

Elk Hills to which I took him. It is merely oil oozed up and dried in the dirt and shale. As Mr. Owen explained it to me it was a fissure that had been blown out there. There was dried oil there, that is it was dried in the dirt and shale. I never made a test to determine whether or not it contained oil and my statement is based upon my observation and upon the test I made with the match when I lit it as it would burn and you could smell it. You could take a piece of that substance and light it with a match. When I was there with Mr. Martin and showed the place to him he told me it was in section 32 or 23. Township 30 South, Range 24 East. This deposit is ten or twelve miles West and a little East of the location of the Headquarters Ranch. You can see the Headquarters Ranch from the top of the hill but not from the brea bed. I was not very familiar with the country from Elk Hills down to the Headquarters Ranch. I never was down through that way. should judge this brea bed is twelve or thirteen miles from McKittrick South and East. It was not in the Buena Vista Hills. It was in the Elk Hills. I couldn't say that it was on that first trip that Mr. Owen told me what his occupation was. He said he was experting and was a Mineralogist for the S. P. or the Southern Pacific. It was on that trip that he told me that the Elk Hills were good oil territory. I used to dig into him quite a bit so as to get some talk out of him. It was pretty hard to dig any talk out of him. The reason that made me do that was that I had some land located [201] and I thought he had pretty good judgment and I dug into him to ask about that land.

I told him: "I have got some land located there myself and I would like to have you go in there to see what you think about it." After I got him in there I kept asking him and I asked him two or three times before I got any answer and then he said: "This is good enough, my boy, hang on to it." I hung on to it as long as I could, three or four years. This land was almost East and South from McKittrick. It was not as far South as we went down into. It was located six or seven miles from McKittrick in the Elk Hills. I don't remember what section it is but it was in the same Township as McKittrick is in. It was three or four miles South of where the railroad passed the cut through the Elk Hills at the Western end. I do not remember the number of the section. (Here the witness placed his finger upon a point in Government Exhibit "I" at about the place where this location was made and the record shows that the witness points to Township 30 South, Range 23 East). Mr. Owen did not tell me that he knew there was oil at the place where I had my location or that he knew there was oil in that part of the Elk Hills. I have seen brea deposits that didn't show by future development the existence of oil but in my experience, wherever you find brea it is an indication that there is an oil belt there or near there somewhere and it has been oozed out there by the gas. It may be a mile or it may be a half mile or it may be right there and it may come straight up. That is my experience in brea. I have known wells to be sunk near those deposits and off to the side to some distance and yield no productive well. Where the Southern Pacific

drilled up on the brea bed at McKittrick they drilled right into the brea and got a dry hole within twenty feet of where they got a well. It is by no means a certainty that there will be oil underlying any particular territory on account of that indication but it was a sure indication that there [202] was oil near there somewhere. Mr. Owen on that trip took dips and samples and so on. That was his business. He told me he thought the territory was very deep and I had no reason to doubt his statement and that was the impression of everyone. I don't know of any person at that time that actually knew of the existence of oil in the Elk Hills. We believed it to be there by reason of its contiguity to proven territory and the indications of the surface were just as good there as anywhere all over that territory. I didn't endeavor to locate any anti-clines in the hills but Mr. Owen did. I merely went with him there to show him that brea on that location. I didn't pay any further attention to the land after I located it for about two years as I was sick and was trying to die more than I was looking for an interest in oil lands then. Before I left McKittrick the last time I was in the hills was when I went out there with Mr. Owen. Mr. Owen. was not developing oil properties. He was on the road getting samples and looking the territory over and that was all I ever did know of him.

RE-DIRECT EXAMINATION OF

CHARLES BRISCO.

If we had drilled a well in the Elk Hills we could not have shipped any oil. I know the S. P. or the S. P. Railroad Company had cars to ship their oil during that depression. [203]

F. OSKAR MARTIN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am the Mineral Inspector of the General Land Office of the Interior Department. I have had experience in engineering and surveying. I was assistant in the soil survey from 1901 to 1905. I was then appointed on the Engineering staff of the Isthmian Canal Commission and served on the canal as Assistant Engineer for one year. Returning to Idaho I was a licensed land surveyor of Idaho. I also held commissions as United States Deputy Mineral Survevor to Idaho and Montana for three or four years. I know Mr. Charles Brisco who testified in this case vesterday. I made a trip with Mr. Brisco into the Elk Hills on the 24th of February, 1912. At that time Mr. Brisco pointed out to me the lands which he and Mr. Owen some years before had gone over together. I identified the lands from the section corners or the government stakes. I showed Mr. Brisco two section corners which he recognized as being the same ones that Mr. Owen and himself at some prior time had seen. I am the Mr. Martin referred to by Mr. Brisco in his testimony. I took Mr. Brisco to the Southwest corner of section 33, Township 30 South, Range 23 East, and he recognized the corner as being the same which Mr. Owen and himself had started from. He pointed out to me the route which Mr.

Owen and himself had taken going in a Northeasterly direction towards the summit of the Elk Hills. Mr. Brisco and I went back to the team and rig from said corner and traveled through sections 32 and 29 to the summit of the Elk Hills. This was in Township 30 South, Range 23 East. We then went Easterly along the summit until we came to the common corner of sections 26, 27, 34 and 35, same township and same range, which Mr. Brisco also recognized as having been seen by him and [204] Mr. Owen. Mr. Brisco and I then went along the summit of Elk Hills into section 31, Township 30 South, Range 24 East and then followed the spur trending in a Northerly direction to the gas or oil seepage which Mr. Brisco recognized as having been the same which he and Mr. Owen had been to. This seepage is situated in the Northwest quarter of Section 32, Township 30 South, Range 24 East. We then returned to the summit and while driving slowly along the summit in a Westerly direction Mr. Brisco pointed out to me the route which he and Professor Owen had taken. From this route which we traveled you can see on either side Northerly or Southerly all over the country. Mr. Brisco pointed out to me from the time we entered the Elk Hills all the lands which he claimed he and Mr. Owen had previously traversed. I made a map from the notes which I took at that time. As a base for the map I used a photo-lithographic copy of Township 30 South, Range 23 East, (Plaintiff's Exhibit "K"). The green line on this map is the route traveled by Mr. Brisco and myself and the red line is the route as traveled by Mr. Owen and Mr. Brisco.

The photo-lithographic copy which I used as the base of this map is from the files of the General Land Office, Washington, D. C.

CROSS EXAMINATION

OF

F. OSKAR MARTIN.

When I went with Mr. Brisco we followed the route that Brisco pointed out to me that he had taken with Mr. Owen as far as the first section corner which would be down at the South line of the Township and from there on we could see the summit. The only place where our routes crossed was in the Southeast of section 27. In other places we were as much as a mile or two from the route traversed by Mr. Brisco and Mr. Owen but we were always in sight of the route. [205]

RE-DIRECT EXAMINATION

OF

F. OSKAR MARTIN.

Mr. Owen and Mr. Brisco traversed through sections 33, 34, 24 and 26, Township 30 South, Range 23 East in a Northeasterly direction. Thence to the East entering Township 30 South, Range 24 East they traveled in a Southeasterly direction to sections 30, 29 and 32. This route was visible at all times from the route which Mr. Brisco and I took.

RE-CROSS EXAMINATION

OF

F. OSKAR MARTIN.

There was nothing to prevent Mr. Brisco and me from following the route that Mr. Brisco had taken

with Mr. Owen but it was not necessary because one can see two or three miles in any direction.' Prior to the time I went over this route with Mr. Brisco I had been over every section there a number of times and had located all the different section corners and I was reasonably sure of knowing in what particular section any land was that I was looking at from the summit. The general route which Mr. Owen and Mr. Brisco took is the same as outlined in Exhibit "K" by the red line. The reason we did not follow the same course followed by Mr. Brisco and Mr. Owen all the way was because Mr. Brisco had an engagement in McKittrick that night and was in a hurry to get back. The chief purpose of my trip was to learn whether or not Mr. Brisco and Mr. Owen had found the gas and oil seepage in Section 32, Township 30 South, Range 24 East, as I regarded that as the important thing. I had been over that ground lots of times before so I knew at the time I was out with Mr. Brisco what Mr. Owen did see as he traveled over that ground. [206]

RE-DIRECT EXAMINATION OF F. OSKAR MARTIN.

I knew from personal observation made prior to my visit with Mr. Brisco what the situation in each particular section was as he pointed them out to me and it was wholly unnecessary to visit those places traversed by Mr. Owen and Mr. Brisco in 1903 as I knew it as well as if I had traversed it over again with Mr. Brisco.

RE-CROSS EXAMINATION OF F. OSKAR MARTIN

Whatever conclusions I drew as to the character

of that township I based upon a very careful examination of the entire township and surrounding country. I have seen those very things which Mr. Owen must have seen.

T. E. KLIPSTEIN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I reside in Bakersfield. I have lived in Kern County twenty-three years and am Secretary of the Eight Oil Company. I was one of the original organizers of that corporation. Associated with me was S. P. Wible, H. T. Tupman, C. F. Haberkern, W. E. Richardson, E. W. McCutcheon, J. Owen and G. G. Wible. The company was organized April 9th, 1909. I know Mr. J. Owen. He is the same gentleman that has been referred to in the testimony here during the last few days. Mr. Owen had two thousand shares of stock in our company. At the time of the organization he had eight thousand shares. We were organized for fifty thousand and thirty-four thousand shares were issued. At the [207] present time Mr. Owen's representatives own two thousand shares. I know Mr. E. T. Dumble. He has two thousand six hundred and sixty seven shares of our company's stock which was issued to him on October 6, 1909. Immediately subsequent to the time of the incorporation of the Eight Oil Company their holdings in Kern County consisted of the North half of section 31, and all of the South half of Section 32 in Township 31 South, Range 23 East, M.D.M.; all of the South half of Section 4, Township 32 South, Range 23 East; all of Sections 26, 30, 32 and 34 in Township 30 South, Range 24 East; all of Sections 20, 22, 24, 26, 28, 30, 32 and 34 in Township 30 South, Range 23 East; all of section 4 and the North half of Section 8 in Township 31 South, Range 24 East. Section 24 in Township 30 South, Range 23 East, has since been conveyed to others. Our company has been engaged in the business of prospecting and mining and development in Township 30 South, 24 East. We have declared dividends on the capital stock and the estate or heirs of Mr. Owen have received dividends amounting to \$15,225. This was paid only on the two thousand shares. Dividends to the amount of \$20,-502.53 have been paid to Mr. E. T. Dumble. Mr. Dumble has voted his stock by proxy within the last year. He sent his proxy by letter signed by himself. (The letter is here identified and read into the record as follows: "Southern Pacific Company. Office of E. T. Dumble, Consulting Geologist. Form 2621 B. In reply refer to No. Houston, Texas, April 6, 1912. I hereby appoint Erwin W. Owen as my proxy to represent me at the meeting of the Eight Oil Company to be held at Bakersfield on Friday, the 12th day of April, 1912, for the purpose of election of Directors and for the transaction of such other business as may properly come before the meeting, and hereby empower him to vote the stock standing in my name, amounting to two thousand six hundred and sixtyseven (2667) shares. Signed E. T. Dumble. Witness: G. T. Carnes. E. M. Johnson.") [208]

CROSS EXAMINATION OF T. E. KLIPSTEIN.

Dividends were paid at different times and since the stock was issued, I think in all four times. The first dividend was paid in 1910. The lands held by this company were first acquired in December 1907 and January, 1908. The only work this company has ever done was in township 30 South, Range 24 East.

CHARLES F. HABERKERN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am forty-six years of age. Am a resident of Bakersfield and have resided in Kern County thirty odd years. I have been engaged in the development and mining or prospecting of lands in the Elk Hills and vicinity for the minerals contained therein. I am one of the original locators of the Eight Oil Company in that section and I am Director of that Company. I knew Josiah Owen during his life time. I knew him very intimately. I have been in the Elk Hills with him remaining there as long as five days at a time. When we were out there we stopped at the Headquarters ranch belonging to Miller and Lux. We looked all over the country and I showed him the minerals I found there. The first time I went in

350

there with him, in August or September, 1904, we went all over the Elk Hills from one end to the other on both sides of the slope. I couldn't say just what year we went but we went all over the Elk Hills, all over those sections. We did not go to the flats, we went just to the hills. I know where Township 30 South, Range 23 East is and in our examination we passed over the lands in that township. I refer to the lands of that township which lie [209] in the hills and which would be the South half of the township. We also went to the townships to the East and to the West of that in those hills. I know of an oil showing, or outcrop, or gas blow-out, in the Northwest quarter of Section 32, Township 30 South, Range 24 East. At that time Mr. Owen and I visited that oil seep and we also went all over the township and Mr. Owen made a careful examination of the lands through the hills and at that time we discussed the possibility of that country for oil, fuller's-earth and gypsum. He told me the land is very valuable for fuller's-earth and gypsum but he thought there was oil there but that it was very deep and it wouldn't pay to go after The showing on Township 30 South, Range 23 East, looked good enough to me to afterwards locate the lands there. My associates and I, in pursuance of that examination made by Mr. Owen and me, later located lands in Township 30 South, Range 23 East. We located the even numbered sections. The reason we didn't locate any odd numbered sections at that time, although I wanted to do it, when Mr. Owen and I went out again he said that he was working for the railroad company and not to take any railroad land. By the railroad lands I understood every odd section is railroad land in Township 30 South, Range 23 East. That township was not surveyed in 1901 but was surveyed later and the stakes were visible on the land. Mr. Owen was experienced in going about the hills and he found the corner stakes and the center stakes. I have four thousand shares of stock in the Eight Oil Company. It was called the Eight Oil Company because there were eight locators. After the Company was organized Mr. Owen told me he wanted to get some stock in the Company for Mr. Hunt and Mr. Dumble and this was arranged. Mr. Owen was employed by the Southern Pacific Railroad Company examining lands and looking after their oil interests. He claimed to be a geologist. I understood that Mr. Dumble was the head man of the [210] Southern Pacific Railroad Company on this coast in the oil and mineral matters. The statement Mr. Owen made to me about keeping off the odd numbered sections in Township 30 South, Range 23 East, was made in August or September, 1904.

CROSS EXAMINATION OF CHARLES F. HABERKERN.

The first location I made in Township 30 South, Range 23 East, was in 1907. I had been there I presume, about a dozen times with Mr. Owen. At the time I made location in 1907 Mr. McCutcheon was with me. I followed Mr. Owen's suggestion about not locating anything except even sections. The first

352

time Mr. Owen went in there with me in 1904 T showed him some mineral that I found in there. I took it for fire clay. The place where I found it was West of the Headquarters Ranch. I didn't remember what section or township it was in but we found fuller's-earth and gypsum all over those hills. We didn't make any locations at that time and not until three years later although Mr. Owen was in the hills with me a number of times during the interim. It was in 1907 that we made our locations on the even sections. I don't know if the odd sections at that time had been patented to the Railroad. At that time I was living in Bakersfield. I probably saw the "Morning Echo", the Bakersfield paper, in 1904 from time to time. The reason we did not locate before 1907 was because after we found out that we had that fuller's-earth Mr. Owen sent it to different chemists and got reports and it was dull times and we couldn't do anything with it: money was scarce and that is the reason we didn't locate at that time. All of the development work of the Eight Oil Company was done on Township 30 South, Range 24 East. The claims in Township 30 South, Range 23 East, don't belong to the Eight Oil Company. I have an interest in that Township, and we developed it. [211] The sections that I was interested in in Township 30 South, Range 23 East, were: Sections 20, 22, 24 and the North half of 26 and 28. We have never sold any gypsum or fuller's-earth from these sections and I have never heard of any being sold. The deposits of fuller's-earth and gypsum in Township 30 South, Range 24 East, are exactly the same as are those in

Township 30 South, Range 23 East. The dividends that were paid were derived from the sale of land in section 32, Township 31 South, Range 23 East and no dividends have been derived from the sale of fuller's-earth or gypsum. Perhaps a month before we made our locations in 1907 we talked the matter over with Mr. Owen and he said to locate on the even sections in 30 South, Range 23 East. It was a couple of years before that when he said that he was working for the Railroad and to let the Railroad land alone. It would be difficult for me to fix the exact time when anything particular was said by him. When we used to go out together we would sit together evenings and talk two or three hours. I know positively when Mr. Owen and I went out into the Elk Hills the first time and I showed him the railroad land where the mineral was on and I said. "How about locating those?" and he said, "No." That was the visit there in August or September, 1904. After that we didn't discuss any more railroad lands in regard to locating them because I knew Mr. Owen didn't like it. On that first trip it was when he said if there is any oil there it would be very deep and he said it wouldn't pay and the only thing that was there that was worthy of any attention was fuller's-earth and gypsum at that time. Mr. Owen made inquiries at that time as to what fuller's-earth was selling for. At the time we made our location in 1907 the nearest producing oil well was at McKittrick and no oil had been found in the Buena Vista Hills. In 1904 when I went into the hills with Mr. Owen he told me there is a possibility of oil there, that it was very deep, from three to four thousand feet. [212] It would not pay at that time because oil was very low at that time. I did not know of any wells at that time that were that deep and such a depth was regarded as prohibitive at that time by a practical oil man. did think it might be oil territory and I didn't pass it up altogether. I know Mr. Owen was working for the Southern Pacific Railroad because he told me so hundreds of times. I am positive about that. Mr. Dumble told me that he was head man from Texas to California of all mineral, coal and oil and other minerals for the Southern Pacific Railroad Company. Mr. Dumble told me that he was producing oil for use on the engines of the railroad. That he was the head man for oils for the roads and was producing in Kern River, McKittrick and Coalinga and that he had charge of the production of oil for fuel on the lines of the Southern Pacific Railroad Company.

RE-CROSS EXAMINATION OF CHARLES F. HEBERKERN.

When I rode over the Elk Hills with Mr. Owen in August or September, 1904, I showed him some lands where there was a lot of fuller's-earth and gypsum and I said, "There is a section" and I told him what section it was. He said, "Mr. Haberkern, don't locate that land. It is Railroad land. I am working for the Railroad Company myself and it wouldn't look good for me to locate the land," and it was marked "S.P.R.R." on a map he had with him. I am

positive that that was stated in that conversation on our first trip and not when I made our locations in 1907 because I never mentioned Railroad land to him afterwards because I knew he wouldn't like it if I would locate it. I am positive that he said in August or September, 1904, that the Railroad then owned the land. In that conversation in 1904 in the Elk Hills he stated that the odd sections were as good as the even; that the Railroad lands in that township were just as good for mineral as [213] the even sections.

W. G. SYLVESTER, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I reside in Bakersfield and have lived in Kern County since 1899. The oil boom had just started when I came there. I know where the Elk Hills are, East of McKittrick. I have been in those hills. The first time I went in there was about the first of January, 1900. I went in looking for mineral locations, petroleum and oil lands. I went from Bakersfield and took a surveyor and a crew of ten men with me. I found the land mostly unsurveyed and we had it surveyed. We spent about three weeks in the Elk Hills. We went all over the territory and surveyed out some of it and located it. I went thoroughly over the surface of the ground in the territory riding over the hills. I think I went over Township 30 South, Range 23 East. I made investigations of those hills for the purpose of ascertaining if there was any evidence of its being oil territory. I didn't have any particular knowledge of oil formations or oil sands except what I could see. I made examinations of the surface indications. At the time I arrived there there was another party in there locating at the same time. His name was Jeff Packard. He had with him quite a number of riders and we were both after the same land. I found evidence of oil there. We started from Headquarters Ranch house and started to survey from a stake there at one of the ranch corners. We had gone into the hills several miles West and we saw indications of what I would call asphaltum. I don't remember what section it was on. It was possibly four or five miles West and possibly a little South of the Headquarters Ranch. We found a rather recent oil seepage which was somewhat dried out although it would burn giving off an odor like coal [214] oil or gasoline. We found this seepage in a gulch and we found asphalt high up on the hill. I located about ten or twenty claims at that time. Packard located in the neighborhood of one hundred or a hundred and fifty, I think. We sort of ran a race to go out and locate the land. He got wind of the fact that we were going to locate the land. We left before he did. He came out horse back and got quite a number of riders from the Headquarters Ranch house, however, parties who were familiar with the territory and I think along about daybreak or 3 or 4 o'clock they came out. The first day we got started we found them in the field with their notices out and running out the lines on horse back. I don't know how they got their lines as it was unsurveyed at that time. We finally compromised with Packard to take an equal share with him of all the lands located. I think there were a hundred and fifty-seven claims located in all, each claim covering a quarter section. With reference to the place where we found the asphalt we located in every direction with the exception of North. The locations may have extended over the North side of the range summit line. I am uncertain. I don't know how much Packard spent but I spent between eight hundred and a thousand Dollars. Our locations extended into four townships, 30 South, 23 East, 30 South, 24 East, 31 South, 23 East and 31 South, 24 East. Our locations lapsed because we couldn't do anything with them. I tried to but I couldn't get anyone to drill as they considered it wild-catting to go in there. We held onto the claims for a couple of years when a greater part of them were re-located after 1902 by the Packard interests. The low price of oil made the attempt to produce oil then too expensive and too risky and made it hard to do anything with it. I believed those lands to be oil lands susceptible of development and production on a commercial basis at the time I made my locations as I went so far as to put down a hole just a little [215] North of there on Section 8 in Township 30 South, Range 23 East. That was 1901. We went down 980 feet. A man by the name of Brisco, who testified here, was the driller. The Empire Oil and Development Company, in which I was the heaviest owner, sunk the well and Brisco was employed by us. We abandoned that well in 1901 because there was so much gas that the drilling became so expensive that we couldn't stand the pressure and had to quit. I don't think we found any oil in that well. I was there at different times when they were drilling. After we got down 980 feet we concluded we would quit drilling and I never went back. We left the boilers and the complete outfit there. I am sure this was on Section 8, Township 30 South, Range 23 East. As to the agricultural possibilities in the Elk Hills for raising crops I think a man would have a picnic raising a crop there as the hills are pretty steep and there is absolutely no water. There is no flat land there excepting the valley between the Elk Hills and the Buena Vista Hills. In a good season I believe there would be grazing anywhere in the hills. I found some gypsum and fuller's-earth in my investigation of the Elk Hills. also noticed the stratification all through there. found stratification in the Elk Hills. You can see it in almost any of the gulches. I am not a geologist but it didn't require a geologist to see it at the time I went into the Elk Hills. When I went into the Elk Hills there was an oil excitement in the vicinity of McKittrick which kept up for several years.

CROSS EXAMINATION OF W. G. SYLVESTER.

The course of the anti-cline was Northwest and Southeast. I presume it was one anti-cline but you could find it in a dozen different places. I started from Bakersfield to locate in the Temblor Hills on account of the oil excitement. The cause of [216] that excitement was the discovery of oil around the

vicinity of McKittrick. We stopped over night at the Headquarters Ranch house and the surveyor I had with me told me that he thought it was ridiculous to go any further, that those hills around there were probably as good as the rest. He said he had been over the hills and they looked as good as the rest and I followed his advice and went to the Elk Hills instead of going beyond McKittrick. I was anxious to locate as many as I could in as short a time as possible but Packard had the advantage as his men were all horseback and he got more claims. There was some dispute about the accuracy of the locations and I persuaded him to knock off a number of his claims. We didn't discover anything until we found this asphalt that we saw. At that time I didn't know that a discovery was essential to a location. Our idea was to cover as much territory with proper monuments and notices as possible. I really don't know whether what we found would be called asphalt. It was a formation similar to the blow-outs they have at McKittrick. I presume asphalt is oil sand which has dried out but I don't know what asphalt is. I don't remember whether the seepage was right close to the vicinity of the blow-out but my recollection is that it was in a deep gulch close by the blow-out. They were not very far apart, probably in the same section in Township 30 South, 24 East, I think, about four or five miles Southwest of Headquarters Ranch. I found no such indications in Township 30 South, 23 East. I did not find any oil men from McKittrick in there trying to locate when I got there. At that time Packard was Marshal of Bakersfield and I was practising

dentistry and neither one of us was a practical oil man. After we made our locations I did nothing further. I did not ever re-locate them. I think Packard re-located those lands two years later. A great many competent oil men came into the country about that time. I didn't see any indication [217] of oil, only what we saw in the hills and over in the gulch. The well I sunk in 1901 was on section 8, Township 30, Range 23 East and it was in a spur of the Elk Hills.

H. A. BLODGET, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I reside at Bakersfield and have resided in Kern County thirty-seven years or more. During the last twenty-three years I have been engaged in handling oil in the Sunset, McKittrick and Midway fields. I am a pioneer in those fields. I have been engaged quite extensively in the business during the last twenty years. The Company with which I was connected owned a large area of oil bearing lands in the Sunset fields and had some interests in the McKittrick in the early days and had large interests in the acreage on the West side since 1890 and some interests in the McKittrick as far back as 1878. In a general way I am thoroughly familiar with the history of the oil industry in Kern County for the last twenty years and I had some interests in McKittrick in 1870. We had some locations in the McKittrick in 1877 or '78. They were made under the mining laws of the

United States and were for the purpose of drilling for oil. I believe I had an interest in probably twenty locations at that time, all being a hundred and sixty acre claims but one. These locations commenced Northwest of McKittrick and extended three or four miles right down both sides of what is now McKittrick, right on down the strike Southeast. By strike I mean strike or outcrop, the strike or the break that was evidenced by oil seepage. These oil seepages were visible, very much in evidence and they extended for four or five miles along the strike or break Northwest and Southeast. That was the general strike of the oil bearing formation through that [218] country. It runs parallel in the valley. The oil developments commenced in the Sunset district about 1888 or 1889 and during the next ten years we had done considerable drilling covering a space of two or three miles. I think prior to 1890 I had practically visited all the asphalt deposits from Sunset to McKittrick. I think I had personally seen all of them. It was at that time when our activities begun on the West side. That was 1890 and then it was within a year or so that I was familiar with all the seepages. The largest seepage was right at McKittrick. Then the break was very marked all along there for a couple of miles or more and there was no brea deposits of any extent Southeast of McKittrick-and there was one quite prominent spring in what was called the head of the Elk valley which was perhaps two and a half or three miles Southeast of this large seepage that I spoke of that is now Mc-Kittrick. From there on I know of no seepages until we struck the Sunset field and the first seepage was just South of the Eight Standard line. It was in Section 2, Township 11 North, Range 24 West. From there the seepages extended for three or four miles Southeast. I was familiar with what had taken place in the development of that country in a general way over the entire field. I was actively interested in oil operations in the vicinity South of McKittrick prior to that time and made asphalt in 1891, 92, 93 and 94. I was familiar in a general way with the development of that country for oil on July 1, 1904. There was a continuous chain of wells from a point, say two or three miles Southeast of old Sunset up into the Midway as far as Chanslor and Canfield's operations and then there was a gap of two miles and then operations commenced with what is known as the Belgian wells and extended for three or four miles Northwest from there through the McKittrick back into the Temblor Hills. There was practically a continuous proven field from the Southeast of Sunset to four or [219] five miles Northwest of McKittrick barring a slip that would be now from Fellows to McKittrick. That slip is now proven territory. At Sunset these developments were right at the beginning of the foothills. The Buena Vista Hills and the Elk Hills are a spur running out several miles from the main ridge of the country. In 1904 the development did not extend to the Buena Vista Hills but extended parallel to them and a little West of them. There was a long draw that separated the Elk Hills from the Buena Vista Hills and practically another draw or valley that separated the Buena

Vista Hills from the low hills that rose back from the back-bone of the ridge. There are two parallel valleys. There was some development East of Mc-Kittrick in July, 1904. This development was by the U. S. Oil Company and was two or three miles East of McKittrick. I think it was before 1904 but I am not positive. I would say that there were more than one hundred wells in July, 1904, in the district from Sunset on the South to McKittrick and Temblor on the North. I remember when the Southern Pacific Railroad was put into McKittrick. I had something to do with the proposition of putting it in there. The inducement that promoted the construction of the road was the prospect of a profitable traffic that was to come out of the production of asphalt and oil in that district. I think the road was put into McKittrick in 1893. At that time I was operating an asphaltum business in the vicinity of McKittrick. interested the Southern Pacific Railroad Company people through Henry F. Williams, who was at that time residing in San Francisco but spent much time in Kern and who was selling town lots in Kern for the Pacific Improvement Company. I knew Mr. Williams to be on very close and cordial terms with the Railroad people and that is why I went to him. I took the matter up with the Railroad authorities. particularly Mr. A. N. Towne, the General Manager. I had a number of interviews with Mr. Towne and visited him several [220] times at San Francisco. helped to organize the Standard Asphalt Company. I would say that the Standard Asphalt Company was one of the subsidiaries of the Southern Pacific Rail364

road Company as it was organized to acquire property that was to be conveyed in consideration of the building of that railroad. The first officers and directors of the Standard Asphalt Company, I think, were Mr. Towne, Mr. Dowtey, Mr. Williams, Mr. Jewett and myself, I think. One half of the stock was held by the directors of the Pacific Improvement Company. One half of the stock of the Standard Asphalt Company was owned by Mr. Jewett and myself and the other half by the Pacific Improvement Company representing the Southern Pacific Railros Company. The railroad was put there in pursuance of these arrangements about the organization of the Standard Asphalt Company in the transferring of the stock and has been operated ever since. The right of wav from Bakersfield to McKittrick was obtained by Mr. H. Williams and me. It was largely donated. There were a number of odd numbered sections which had been patented to the Southern Pacific Railroad Company crossed by this road from Bakersfield to McKittrick and I do not think any right was specifically obtained. The railroad owned the sections and there was no necessity for giving them what they already had. The interests of Jewett and Blodget were transferred to the Standard Asphalt Company in accordance with the agreement for the building of this railroad. At that time Jewett and Blodget had some leases of oil lands in the Mc-Kittrick field and some lands in fee in the Sunset field, all of which were conveyed to the Standard Asphalt Company pursuant to the arrangement. At that time we had extensive lease-hold interests at

McKittrick and also a great deal of land in Sunset. At that time we had shipped several hundred tons of Asphalt. Prior to that time it was a paying busi-We had to transport a long distance by team from Sunset and McKittrick to Bakersfield and [221] it was very expensive but we had delivered a good deal of asphalt and we were satisfied that it would be a paying business and would justify the construction of a railroad which would furnish transportation. The future probabilities of that district or the country tributary to the Southern Pacific branch into McKittrick as an oil producing and oil shipping community figured largely in the inducements which lead to the putting of the road in there at that time. The portion of the road from Lokern to McKittrick was built to furnish transportation for the production of oil and asphalt from that McKittrick field. The probabilities of a great production of oil and shipment of oil in the future from that district was understood by the railroad officials as an inducement to get them to build a road through there as I had personally brought that matter to Mr. Towne's attention. I told Mr. Towne that the deposits of asphaltum in evidence in that district was a drop in the bucket only to the quantity of oil that was tanked underneath and that would be produced. In other words the visible evidence of tonnage was as nothing, practically, compared to what was underneath. Jewett and Blodget continued to hold their interests in the Standard Asphalt Company about three or four years. We then surrendered our stock in the Company and had conveyed to us the holdings

in the Sunset field, that is, the interests in the two fields were segregated. The Pacific Improvement Company acquired our stock. There was a considerable oil boom in Kern County in 1899 or 1900. The oil excitement was very general. I should say that excitement kept up three years or such a matter. It was shared in by the geologists and competent oil men and men of experience in oil formation. The excitement drew everybody into that district who was connected with the oil business or who expected to be connected with the oil business, and there was a great deal of activity in the McKittrick field. On account of the low price of oil it was not profitable to produce it under any circumstance and that was the reason of [222] the slacking up of the excitement. The lack of cars for transportation had also considerable to do with it as the two factors made the marketing of oil practically prohibitive. Oil could not be produced profitably and investors lost interest. That practically paralyzed that region and developments ceased. The Associated Oil Company had production in the McKittrick. I don't know what extent they had cars but they were transporting railroad oil and that took precedence over everything else. I know Mr. W. E. Youle. 'He was Superintendent for us for many years, principally at Sunset, also at Mc-Kittrick where he was in charge of the Standard Asphalt Company. He was a man of wide experience. We acted largely upon his advice. He made examinations of the country in general. We had Mr. Youle make an examination of the country in general and he reported on it and we instructed him to

assist and facilitate the making of our locations in the Elk Hills. He went out there as an experienced oil man or man familiar with oil, at our request. He had had a wide experience all over this state and in the East and it was particularly his experience on the coast that made his opinion valuable and we asked him to look at the Elk Hills country and give us his opinion as we had sufficient confidence in his ability and integrity to expend large sums of money on his advice as to the value of lands for oil. reported that the Elk Hills showed indications of being oil bearing and that he believed we were justified in making the locations and endeavoring to acquire title. We made a hundred or two locations. I don't know the exact number. Associated with me in these locations were J. I. Wagy, Mr. Lamont, Mr. Jewett, Mr. Farnum, Mr. Packard. I think Mr. Youle's name was on some of these locations. I think the first of these locations were made on December 31, 1899. The locations covered a big stretch of country from the Elk Hills to the Buena Vista Hills. We kept up those locations for about six [223] years. We spent a good deal of money on these locations. At the time I became interested in these locations and during the time I continued to be interested in them I believed that the indications in the Elk Hills were good. The prospects were and that is all you ever "wild-eat" on-your belief or expectations. I have never had any reason to change my opinion. There has been some deep wells drilled in the Elk Hills. That was within the last two or three years. I don't know the exact location of them. There were some

successfully drilled by the Associated Oil Company at the North end of the same section of the country on some of the land we had originally located. I was interested in the purchase of some railroad lands in the West side in 1900 or 1901 possibly. ceeded in purchasing five sections but were prevented from purchasing more by the withdrawal of the land from sale by the Railroad Company, who, acting under the advice and recommendation of their agent, Mr. J. B. Treadwell, had withdrawn any further land from sale in that field. I knew Mr. J.B. Treadwell quite well. He had told me that he represented the Railroad Company in the segregation of their oil lands and in the passing upon the probable oil bearing qualities of their lands. In 1902 we endeavored to sell the West side oil properties to the Southern Pacific Railroad Company. Mr. C. N. Beale and I went to New York on our way to London to see the representatives of some English and French capital about the purchase of the property. Mr. Beale was one of my associates and we stopped in New York and I went to see Mr. Harriman at the office of the Southern Pacific Company and he referred us to Mr. Kruttschnitt. We went fully into the matter with Mr. Kruttschuitt and showed him our maps and all the data which we had prepared. We discussed the matter generally with Mr. Harriman, the extent of the field, its desirability and so on. interview lasted some time and then the matter was turned over to Mr. Kruttschnitt. We had three interviews with him. [224] I don't recall the specific details of the conversation with Mr. Harriman. We were presenting our West side properties. They were very extensive and that involved a general discussion of the conditions on the West side, the character of the country and its value as an oil producing country. Everything relating to it to the best of my recollection was gone into. Mr. Harriman was a man who asked very incisive questions and it was presented by us with all the force that we possessed. I had not met him personally before that time. Then we were referred to Mr. Kruttschnitt, who went with us to our hotel where we had all the documents, maps and papers and we spent a couple of hours going through the thing very carefully in detail. I know Mr. W. S. Porter. I think he was President and General Manager of the Associated Oil Company. When I went to Mr. Harriman's office I met Mr. Porter, I think, in the outer office but not in the presence of Mr. Harriman. Mr. Porter did not take any part in the discussion I had with Mr. Harriman or Mr. Kruttschnitt. At that time he was connected with the Associated Oil Company. I have had over twenty years experience as an active operator in Kern County on the West side and during that time was familiar with the oil conditions and the oil business in that country. I know the plans that precede the formation of the Associated Oil Company as I was actively interested. In a general way, prior to the time I went East in 1902 to see Mr. Harriman and Mr. Kruttschnitt, I was familiar with the general operations and business of the Associated Oil Company and after my return I was familiar in the same general way with the conditions and operations of the Associated Oil Company. When I returned there was a change in the general conduct and management of the affairs of the Associated. The Associated Oil Company at that time was delivering large quantities of crude oil to the Southern Pacific Railroad Company and the Southern Pacific Railroad—that is, the [225] Company's call for oil and facilities for transportation had precedence over that of all other purchasers and handlers of oil. Before I went East the Railroad Company was buying oil of all producers in all fields in Kern County. This change caused a lack of facilities for transportation, shortage of cars, and made it practically prohibitive for the shipment of oil out of the West side field and the river field for independent producers. The five sections that we purchased from the Southern Pacific Railroad before they withdrew the land under the advice of Mr. Treadwell, were sections 1, 11, 13 in Township 31 South, Range 22 East, and sections 7 and 19 in Township 31 South, Range 23 East. Deeds were procured from the Land Department of the Southern Pacific Railroad Company for four of these sections. The sections that we attempted to purchase at that time were Southeast of those that we purchased. do not remember their number but they would be in Township 31 South, Range 23 East. We were not able to purchase or procure the title to these sections for the reason that I gave yesterday; they were withdrawn while our representative was in the office of the Southern Pacific Railroad Company. At the time that we became interested in those locations in the Elk Hills it was the intention of my associates and myself to prospect that country and develop it for oil.

CROSS-EXAMINATION OF

H. A. BLODGET.

By Mr. Lewers:

Q. Did you prospect and develop it for oil?

A. No. We did some road-building, and built a cabin and maintained—had a camp maintained there for some time, many months; but we never drilled.

Q. Did you ever make any discovery on any of your claims?

A. Nothing more than was developed by prospecting, that [226] is digging or excavating for roads and digging holes that would be developed for the matter of minerals like gypsum.

Q. Did you ever make any discovery of mineral in place anywhere on your locations, to your knowledge?

A. Well, not to my personal knowledge, because I didn't visit the hills at that time.

Q. You were quite generally interested in the oil business at that time, were you not?

A. I was.

Q. All over that country, practically?

A. No; not practically all over the country. I had interests, though, in McKittrick and in the Sunset field. It was principally in the Sunset field.

Q. And wherever you heard of discoveries of oil you became interested, did you not?

A. You mean financially interested, or took a personal interest in it?

Q. Personal interest, I mean.

A. I was interested to know what was going on; yes sir.

Q. And you visited a great many properties that you heard showed oil indication, did you not?

A. No; not a great many. I was familiar with the country from northwest of McKittrick clear down to Tejon Canyon, and in a general way, with the country from the valley over to the summit; but I never was up northwest.

Q. You have testified to quite a considerable oil development from Sunset up to McKittrick and beyond. That is in one general line, is it not?

A. In a general line; yes sir.

Q. It is down along the edge of the Temblor Range, is it not?

A. If you call it that; yes. It is the main ridge, range [227] of hills, through that country.

Q. It is quite close to the main ridge of hills?

A. Yes sir.

Q. Running northwest and southeast?

A. Along the flank of that range; yes sir.

Q. And from an early time you were familiar with many portions of that range, were you not?

A. I was familiar with portions of it; intimately familiar with some portions and only in a general way with the rest.

Q. Now, when was it that you employed W. E. Youle?

- A. I think it was about 1891 or 1892.
- Q. And where was he employed at that time by you?
- A. He was employed by us in the Sunset field and at McKittrick.
- Q. His duties carried him between those two places, did they not?
 - A. At times; yes sir.
- Q. Did you at any time instruct him to investigate conditions in the surrounding country as to oil?
 - A. I did.
 - Q. That was one of his duties, was it not?
- A. No, not generally; not as a—I take it that you mean that he had a sort of general commission to do that. That was not the case. We at certain times asked him to inspect certain localities. He did not have a general commission to be constantly on the look-out for land.
- Q. Now, I understand that the firm of Jewett & Blodget placed a good deal of confidence in the opinion of Mr. Youle?
- A. We had confidence in his judgment. He was a man of wide practical experience in the oil business. He did not claim to be a geologist, particularly.
- Q. And when he reported favorably upon territory which you [228] had him examine, you acted upon his advice generally, did you not?
- A. Well, I don't know that we acted upon it. We did in many instances, several instances. We valued his advice; accepted it.

Q. Did you not as a general rule follow his advice as to development?

A. Oh, I think so; yes. That covers a long range of a good many years and we were governed in our development by many things; but Mr. Youle's opinion we considered good, and his judgment good, and believed it better than our own in some of those particulars.

Q. And then you did very commonly follow Mr. Youle's advice in developing oil properties, did you?

A. Yes, and in locating.

Q. Development and locating?

A. Yes.

Q. Did you not, from time to time, locate oil properties which you did not develop?

A. Yes; we have located some that we haven't developed.

Q. Was that ever due to any advice upon that property given by Mr. Youle?

A. That we did not develop?

Q. Yes.

A. No; not that I recall.

Q. In no instance did you refrain from developing property by reason of anything that Mr. Youle had reported. Is that correct?

A. No. We had a long strip of territory that was on the strike, both sides, and we very early in our development work abandoned any idea of doing any development work to the west of the strike. [229]

Q. Was that due to any opinion advanced by Mr. Youle?

A. It probably was. It might have been. I don't recall particularly. I visited the field often and inspected the territory.

Q. Then in some instances, at least, you refrained from development work on the advice of Mr. Youle?

A. I don't know that we had any particular intention of development west of this break that I speak of in here. The locations of the wells were always discussed with Mr. Youle and his opinions considered, whatever they were, as advanced.

Q. Well, now, can you not give me a specific answer to this question: Did you ever refrain from developing any property by reason of advice given by Mr. Youle? That can be answered by yes or no.

A. Yes, if I could remember all the conversations, the times that I have asked his advice in that length of time. I would not want to reply to that question except generally. We generally followed his advice in regard to the location of wells, which would be the development work that you speak of.

Q. Did you ever follow your own inclinations without regard to Mr. Youle's advice in any instance where you refrained from developing property that you had located?

A. As I said a moment ago, I would feel unwilling to answer that question except in a general way. Mr. Youle was always consulted by me with regard to the location of wells and the plan of the development work, and I then had and still have a high regard for his judgment. I had no practical knowledge myself except what I had acquired in that field, and my recollection is that I followed his advice usually.

Q. Then it is a fact, Mr. Blodget, that you generally followed the advice of Mr. Youle, either as to the development or as to the non-development of any particular piece of [230] property? Is that correct?

A. Well, it wouldn't be conclusive, at all; no. I might have concluded to do things without—that is, in the acquisition of claims, without consulting him at all. Where his advice would be valued would be in regard to the location of wells, or the details; not necessarily as to policy.

Q. Well now, which is the fact? That you did generally follow his advise?

A. That is what I said.

Q. Or that you didn't?

A. I said that in the location of wells we followed his advice largely.

Q. Well now, did you follow his advice generally in refraining from developing property which you had located?

A. Well, as I say, our policy in the development of that property was the result of several factors, and—

Q. Can't you give me a specific answer?

A. "Yes" or "No"? Why, do you know that that territory is 25 miles, and covers all kinds of property—that is, all kinds of surface conditions and all sorts of conditions, and I saw Mr. Youle often through many years and I can't recall the details of those conferences or the reasons at that time for any particular policy or any particular specific action.

We were developing in the Sunset a strip of country about seven miles long.

Now, the question, Mr. Blodget, is this, if you will pay attention to it.

- A. I will pay attention to it.
- Q. Is it not the fact that you generally—I don't mean universally, but generally—followed the advice of Mr. Youle wherever you refrained from developing any property that you had under location?

[231]

- Mr. Mills—I object to the question, because the record shows it has been answered by the witness at least four different times, that he followed it in a general way.
- Q. By Mr. Lewers—I want specific answers to my questions.
- A. Do you mean that we asked Mr. Youle whether or not we should refrain from developing any particular property?
- Q. Will you read the question to the witness, Mr. Longley. (The question: "Is it not the fact that you generally—I don't mean universally, but generally—followed the advice of Mr. Youle wherever you refrained from developing any property that you had under location?" was read by the reporter.)
- A. I will just answer that question this way, that where we did do any development we generally followed Mr. Youle's advice; followed it largely. When we refrained from developing property we might refrain from many reasons.
 - Q. Then you didn't generally refrain from devel-

oping property by reason of Mr. Youle's advice? Is that correct?

A. Read that question, please. (Question read by the reporter.) "Generally refrain"? No; I don't know that we asked Mr. Youle's advice when we concluded we would refrain from developing any territory. We consulted Mr. Youle generally and frequently in regard to the carrying on of the work, the location of wells, and everything connected with the development work. The policy of our development was something entirely apart from Mr. Youle's province.

Q. That was something entirely apart from Mr. Youle's province?

A. Our policy as to whether we would develop or not develop; yes.

Q. When did you first go into the Elk Hills?

A. Into the Elk Hills, probably in I think the spring [232] of 1908.

Q. That was the first time you were ever in there?

A. The first time I was ever in the Elk Hills; yes sir.

Q. And you don't remember, of your own knowledge, anything about what was known in the Elk Hills or what was in the Elk Hills prior to that time, do you? Of your own knowledge?

A. What was in it?

Q. Yes.

A. I hadn't been in them; no. I had been around them, all around them, completely around them.

Q. These locations you have spoken of as being

over there, in which your name appeared, were locations that were not made by yourself personally?

- A. They were not.
- Q. You had nothing to do with the determination of where those locations were to be, did you?
 - A. I did; yes sir.
 - Q. What did you have to do?
- A. I agreed with my associates exactly where they would be; made the selection from the map as to the country we wanted to locate.
 - Q. You made the selection from the map?
 - A. Yes sir.
 - Q. Not from the ground?
 - A. No sir.
- Q. You know of no discovery of oil on any one of those sections during the time you held them, do you?
 - A. No.
- Q. And did you ever get any returns in the way of profit from any of those locations on that ground while you held them?
 - A. You mean in excess of cost?
 - Q. Yes. [233]
- A. Or any returns? We sold one of our locations, that is, the location on one section.
- Q. I don't mean sales of the locations. I mean profit.
 - A. Profit from the operation of the property?
 - Q. Yes.
 - A. No.
 - Q. Not one cent?
 - A. No.

- Q. And you held part of them for a period of about six years, did you?
 - A. I did.
- Q. Now, at that time you were in touch with a great many men who had capital, were you not?
 - A. Yes sir. More or less, yes.
- Q. That is, from the time you first went into that territory you were in a position to interest men who had money, were you not?
- A. Well, anybody was in a position to interest men with money if he has anything that is interesting to offer. I didn't hold the edge over anybody else in that particular that I know of.
- Q. Were you not associated in business with many men who had ample capital?
- A. Yes; I had an ordinary acquaintance with men who had capital.
- Q. Were you not associated in a business way with them?
 - A. Not with any who were in the oil business.
- Q. That is not the question. Were you not associated in a business way with many men who had ample capital?
 - A. No, not many.
 - Q. You were with some, were you not?
- A. Well, I was associated in a business way with some wealthy men; yes. [234]
- Q. You spoke of making a trip to New York with Mr. W. H. Beale, was it not?
 - A. Not W. H.; Mr. C. N.
- Q. Now, Mr. C. N. Beale was the personal representative of whom?

- A. The personal representative of himself.
- Q. And no one else?
- A. No sir; not that I know of.
- Q. Did he at that time-
- A. Oh, he at that time was connected with some with the Kern County Land Company people in Bakersfield.
 - Q. Was he acquainted in any way with Mr. Tevis?
 - A. He was connected with W. S. Tevis; yes sir.
- Q. Mr. W. S. Tevis was a man who had ample capital, was he not?
 - A. He was a man of large capital.
- Q. At that time, I understood you to say on your direct examination, you were connected with a bank in Bakersfield?
 - A. At that time I was a director of a bank.
 - Q. Which bank was that?
 - A. Kern Valley Bank.
- Q. And Mr. Tevis was also connected with that bank, was he not?
 - A. He was not.
 - Q. Never has been?
 - A. Never.
 - Q. Is that bank running now?
 - A. No sir.
 - Q. When did it close?
 - A. Some time in 1911; May, I think.
- Q. Was Mr. Beale in any way connected with that bank?
 - A. Never. [235]
 - Q. He was not at the time of its closing?

A. No sir; had no connection whatever.

Q. Well, now, did you, through your connection with that bank, become associated in a business way with any other men who had capital and plenty of it?

A. No sir; not that I know of.

Q. Not that you know of?

A. No.

Q. And were there any other men of capital interested with you anywhere in the oil deals?

A. Nobody interested with me except Mr. Jewett that I spoke of and my associates in these locations, in the purchase of these sections that I spoke of.

Q. Now, did any of your associates in the purchase of these sections have means of their own?

A. Not large; no.

Q. And you say that you endeavored to purchase certain land in 1901 or 1900? Is that correct?

A. Buying railroad lands, yes, in 1900 or 1901.
 About that time. I didn't look up the dates.

Q. And you did purchase Sections 1, 11 and 13 in Township 31-22?

A. Yes sir.

Q. From whom did you make that purchase?

A. The Southern Pacific Railroad Company.

Q. From what representative of that Railroad Company?

A. The Land Department, Jerome Madden.

Q. From Jerome Madden?

A. I think so.

- Q. You didn't make that purchase from Mr. Treadwell?
 - A. No sir.
 - Q. Or from Mr. Owen? [236]
 - A. No sir.
 - Q. But you made that from Jerome Madden?
- A. I didn't make it personally. Mr. Packard, who transacted the business, made the purchase; but it was for himself, myself and our associates. There were four interested.
- Q. And you say that you attempted to purchase other land but didn't succeed?
 - A. That is right. Yes sir.
- Q. That was land that had already been patented to the railroad company, was it not?
 - A. Yes sir.
- Q. Did you ever attempt to make a purchase of any lands in the Elk Hills?
 - A. No sir.
- Q. Now, I understand you to say that in 1900 or 1901 there was quite a considerable oil excitement?
 - A. Yes; 1900 and 1901.
 - Q. How long did it continue?
 - A. It continued, I think into the spring of 1902.
 - Q. No longer?
- A. Well, no longer, I think, than the summer of 1902, at that time.
- Q. You have heard the testimony of other witnesses here that it continued for two or three years?
- A. I know it. I think I heard one witness testify to that. That was correct.

- Q. It did continue two or three years?
- A. It commenced in 1899 and continued until 1901. That would be two or three years. 1902.
 - Q. It commenced in 1899, then?
 - A. Yes sir.
- Q. And during that time a great many men came into that [237] country?
 - A. Yes sir.
 - Q. Including many competent oil men?
 - A. I presume they considered themselves such.
 - Q. Well, how did you consider them?
- A. Well, they were men who had—wherever they were men who had practical experience in the oil business I considered them competent men.
- Q. Did you not testify in direct examination that many competent oil men came in during that excitement?
- A. I might have done so. There were a good many competent oil men—as competent as men in those days.
- Q. There were a great many men came in who knew nothing whatever about oil, were there not?
 - A. Yes sir.
- Q. And locations were made on a great deal of territory that you regarded as of no value? Is not that correct?
- A. Well, I don't know anything about the scope of the locations and I don't know that I ever stopped to consider where they were locations made on land that I thought at that time were lands of no value.
 - Q. Do you mean to say that you were in there,

interested in the oil business, during that excitement, and didn't take into consideration where these locations were made by different individuals?

A. Oh, they were made by hundreds every day. The records were just overwhelmed with them. And I might have noticed them in a general way, but I didn't take the trouble to figure out these particular locations. As I said a moment ago, there were many locations made, as I remember them now, on lands that I didn't think were oil-bearing.

Q. Well now, wasn't it a matter of considerable comment [238] that these men who knew nothing about oil came in and located the whole country?

A. Well, they located the country pretty generally from Tejon Canyon to the north line of the country, from Tejon Canyon to Devil's Den—plastered with locations.

Q. Good, bad and indifferent land was located? Was not that a fact?

A. It depended, I suppose, on the fancy of the locator.

Q. And not upon his expert knowledge?

A. He might have thought he had expert knowledge. I don't know. I didn't talk with those men or have any idea what their—that is, you speak about all the locators. I had no acquaintance with them and no conversation with them, and no idea what their ideas were.

Q. And was it not the fact that in many places there were two, three, four and five locations one on top of the other? A. I don't know. The records would show that.

Q. Well, don't you know that to be the fact?

A. You say "one, two, three, four, five." No; I don't know that I do. There were many instances where locations lapped. I think some of my knowledge; but I don't know how many. That is a matter that the records would disclose.

Q. And were there not numerous locations upon which no development at all was done?

A. There were locations on much land on which no development work was done; yes sir. That was the custom at that time.

Q. And you yourself were interested in certain locations upon which you did no development work at all?

A. No. Up until the decision of the court that the assessment work was valueless and did not in any way tend to preserve title to the claim, we always did our assessment work [239] on the claims I was interested in.

Q. You say "the decision of the court that assessment work was valueless."

A. In effect.

Q. Wasn't the decision to which you refer one that you must have a discovery before you can have a valid claim?

A. No; I don't know that that was exactly the case. We made some locations at a very early day, and at that time they were made under the placer mining laws and the custom and the general understanding was that if you did your annual assessment work of \$100 you would hold the claim.

Q. Even though you had no discovery?

A. Well, that was a point that was adjudicated later. The general custom was, the belief was—well, the general custom through the country—that if you did your assessment work you hold the claim. Until that was adjudicated, that was the belief.

Q. Now, referring to those claims you were interested in over in the Elk Hills, did you do your assessment work?

A. Not on all the claims. We did some considerble assessment work.

Q. And you relocated, didn't you?

A. We did.

Q. Several times?

A. Yes sir.

Q. That relocation was made in each instance because the assessment work hadn't been done, wasn't it?

A. Well, not necessarily. It was done because the location was supposed to be color of title, or prima facie title—possession—and it was with a view of retaining the claims until such time as conditions would justify developing them.

Q. Well, wasn't it regarded by you as necessary to relocate because you had not done your assessment work? [240]

A. Well, that might have been a reason for it.

Q. That was the reason, wasn't it?

A. That was one reason; yes.

Q. Wasn't that the chief and only reason?

A. Well, if we didn't do the assessment work we

were compelled to relocate on our claim or our claim with not valid under the mining laws.

- Q. That is the reason you relocated?
- A. Yes sir.
- Q. And at the time when you relocated, in each instance, you had as yet made no discovery of oil?
 - A. No.
 - Q. And never did make one?
 - A. No.
- Q. And at the time when you first located, and on those subsequent times, you didn't know that there was any oil there, did you?
 - A. No.
 - Q. And never did know.
 - A. No.
 - Q. And don't know it now?
 - A. Yes; we know, wherever there has been development that has found oil—we know now.
 - Q. I am referring to the Elk Hills.
- A. No. You are referring, I presume—that is, I am referring to the land that was covered by our locations.
 - Q. In the Elk Hills?
- A. In the Elk Hills. At that time it covered the Elk Hills, as I testified yesterday, and the Buena Vista Hills and down into the valley, the flat, on the east side. It covered a wide area.
- Q. Now, is it not a fact that you and your associates [241] made many locations during that oil excitement without the intention at all of developing them but for the purpose of speculating and selling the land?

A. No. As far as we were concerned, we made no locations on the West side that we didn't retain and do assessment work.

Q. I am referring to those.

A. Well, then, I have answered the question. The question was, did we not make locations without any intention of developing. That was not so. We did intend to develop all we located.

Q. You did intend to develop those that you located in the Elk Hills?

A. That was the general intention. As far as I was concerned, it was my intention to develop them. We could not dispose of them otherwise.

Q. Why didn't you develop them?

A. The conditions of the oil business were such that it would have been ridiculous to have spent any money during that entire period.

Q. During what period?

A. The period extending from 1902 to 1905 or 1906.

Q. Then, did you, during that period, between 1902 and 1905 and '06, totally abandon all development on all of your property?

A. No; we retained possession, as I tell you. We kept a man there awhile—I don't remember just how long—and maintained our locations, renewed our locations, held color of title.

Q. That is not the question. Did you cease, absolutely, all development on all of your properties everywhere during that period?

A. Doing development work? Practically, yes.

Wait a [242] moment. We operated our producing wells in the Sunset field, and we did some development work in 1903 and 1904—1903—and then we didn't commence again until 1907.

Q. Then, during 1902 and '03, you did actual development work on some of your properties?

A. Yes.

Q. Why didn't you on the properties in the Elk Hills during that same period?

A. Well, because in the Jewett & Blodget interests we only had a small interest, proportionately, and we were developing our own property, where we had facilities for handling the oil to a limited extent.

Q. Was that your sole reason for not developing that property in the Elk Hills?

A. That was—The reasons for not developing the property in the Elk Hills was that there was no market for oil. The price was so low that if you had had a thousand barrels a day in the Elk Hills you could not have transported it, it wouldn't be worth a cent. And, as far as I am personally concerned, the only development work that we could afford to do was on our own property that we owned exclusively.

Q. Then the reasons you have given are the sole reasons for not developing that property in the Elk Hills?

A. I consider those were reasons enough—that the oil had no value.

Q. Did you have any oil there?

A. In the Elk Hills?

Q. To your knowledge?

- A. You asked about the development of oil. I answer that we got no oil in the Elk Hills.
- Q. Well, was not the fact that you had found no oil in the Elk Hills, and that you didn't know whether you ever would find [243] any, the reason why you didn't develop those properties?
- A. You don't suppose we expected to find it running out of the ground, do you? It costs money to find oil in any oil territory.
 - Q. Will you kindly answer my question.
- Mr. Mills-I submit he has made a sufficient answer.

Mr. Lewers—Please read the question, Mr. Longlev.

(Last question read by the reporter.)

- A. No.
- Q. That had nothing to do with it? Is that correct?
- A. Well, I don't know how I can answer it more fully than I have. To find oil in the Elk Hills or in any other oil territory requires an expenditure of money and the perfection of an organization and a large amount of equipment, and all that, and the market conditions and the physical conditions at that time were such that there was no justification for doing anything of the kind. We didn't make any attempt to find oil in Elk Hills by drilling—the only way it could be found. The reason we didn't do that was because oil had no value. If we had had a thousand barrels a day, as I stated, in the Elk Hills, it wouldn't have been worth a nickel.

Q. And yet, Mr. Blodget, you continued to develop properties elsewhere where oil was not worth one cent more than it would have been in the Elk Hills?

A. Well, the only development we did was right along side the railroad track, that would give it a little more value—not much—than if it was in the Elk Hills, under the conditions that existed—that is, a little more value under the conditions that existed at the time you mention, 1902 and '03—than if it was in the Elk Hills, but it did have a little percentage.

Q. Did the fact that your land in the Elk Hills was further west from the main ridge have any bearing whatever on [244] your refraining from developing?

A. No. The fact was that it was east, and in exactly the right direction.

Q. I mean east. And in exactly the right direction?

A. Yes.

Q. Then you regarded it as more valuable than the land near McKittrick because it was further east, did you?

A. I regarded it more valuable than any land lying west of the strike or the outcrop.

Q. That is not the question. You have testified that you had an interest in numerous wells lying to the east of the main range and close to it, right along it?

A. Well.

Q. Did you, in 1900, and up to 1905, not regard

the territory lying right along the foot of the main range as more valuable for oil than territory farther east?

A. I would have considered the prospects for getting oil there better; yes sir.

Q. Very much better, would you not think?

A. Closer to the outcrop; yes sir.

Q. And was not that one reason why you continued your development, during the depression, close to the outcrop, and refrained from doing so to the east thereof in the Elk Hills?

A. No sir.

Q. That had nothing to do with it?

A. Not at that time; no sir.

Q. Then you at that time had no reason in your own mind to prefer the territory for development purposes near the main ridge over that in the Elk Hills?

A. No reason?

Q. Yes.

A. Yes; several reasons. [245]

Q. What was it?

A. The reasons for preferring the territory lying nearer the ridge was that it was more—we would consider it more certain, and all the development was done by the concern with which I was connected was done right beside the railroad, with transportation facilities.

Q. Then you regarded that near the ridge as more certain than that lying over in the Elk Hills?

Mr. Mills—I object to that question. The record shows that the witness just answered the question.

A. Yes. Near the outcrop, we would call it, near the strike, the strike of the outcrop I would consider more certain.

Q. By Mr. Lewers—And then, to some extent at least, you regarded the discovery of oil in the Elk Hills as uncertain?

A. I would not consider the discovery of oil at any particular point certain in an untried field.

Q. Did you not consider the discovery of oil in the Elk Hills at that time as far more problematical than that near the ridge?

A. That would depend upon how close to the ridge. I would consider it more problematical to find oil at a distance from a known development than closer, sure.

Q. And did not that distance and the greater uncertainty as to the discovery of any oil at all in the Elk Hills have some influence on your refraining from doing development work?

A. At that time?

Q. Yes.

A. No sir. [246]

Q. None whatever?

A. No sir.

Q. Did you not ordinarily, in determining whether you should carry on development work, on any of your properties, take into consideration, as a very important factor, the probabilities of discovering oil?

A. I did.

Q. And did you not, as a rule, direct your devel-

opment work toward those points where you regarded the discovery of oil as more certain than at other points?

A. We did; yes sir. The obtaining of oil. This was not a discovery. The development of a known field is very different from operating or prospecting in an unknown field. I would answer your question, Yes.

Q. You then regarded the Elk Hills as a totally unknown field?

A. It was unknown; yes sir.

Q. Now, in what territory did this depression in the price of oil exist?

A. On the Pacific Coast.

Q. Was it due, in all of these territories, to the Associated Oil Company having cars furnished it by the Southern Pacific Company?

A. No. I would think not.

Q. It was a natural economic condition at that time, was it not?

A. It was brought about by the alleged over-production of oil and the lack of transportation facilities.

Q. Is it not a fact, Mr. Blodget, that, beginning along in 1899 and extending up two or three years after that, there was a vast and sudden increase in the production of oil in California?

A. There was; a very large increase. [247]

Q. And the production, for the time-being, outstripped the means of making use of it, did it not? A. Yes. There was a supposed, or alleged, as I say, surplus of oil, excess of production.

Q. That is, conditions had not had time to adjust themselves to the increased production? Is not that the fact?

A. The market had not responded in proportion to the development of oil.

Q. And you would not attribute that entirely, then to the shortage of cars?

A. Attribute what?

Q. The depression in the price of oil.

A. No; I would not attribute it entirely to the shortage of cars. No.

Q. The shortage of cars was simply one symptom of a very general condition of lack of ability to handle the increased production, wasn't it?

A. I think it was a symptom of a desire not to furnish the facilities. I don't know that it was inability to furnish the facilities.

Q. Mr. Lewers—I move that the answer be stricken out, as not responsive. Read the question again, Mr. Longley. (Last question read by the reporter.)

The Witness—Read the answer, please. (Last answer read by the reporter.) I can't modify that answer, from my knowledge of the conditions.

Q. By Mr. Lewers—Mr. Blodget, if you will pay attention to the question—

A. I have,

Q. —I think you can answer it. Was not the shortage of cars, whatever it may have been, due to

one symptom of a very general condition of inability to handle the increased pro- [248] duction of oil?

- A. "Handle" by whom?
- Q. Everybody.
- A. You mean the producer or the carrier?
- Q. The ultimate disposition and consumption.
- A. It was a symptom of the inability of the producer, yes; of the carrier, no.
- Q. The carrier, at that time, even though the production of oil increased, as you have stated, very suddenly and greatly, had merely to issue the order and tank-cars would be forthcoming in any conceivable quantity? Is that correct?
 - A. Is that your statement, or is it a question?
 - Q. That is a question.
- A. I don't know what the ability of the railroad companies was to purchase tank-cars here. They were purchasing tank-cars at that time. Whether they purchased all they could or not would be another matter.
- Q. Isn't it a fact that beginning at that time the purchase of tank-cars, not only on the Southern Pacific but the Santa Fe, increased quite rapidly?
 - A. Yes; quite rapidly.
- Q. And isn't it also a fact that many independent producers of oil themselves purchased tank-cars?
 - A. I don't know of but one.
 - Q. The Associated?
- A. Well, the Associated just painted the letters "S. P." out and put "A. O. Company" on. Our friend Captain Bunting purchased some cars.

- Q. You have no feeling in this matter?
- A. Not at all.
- Q. Not a bit?
- A. I am just stating facts. That is all. [249]
- Q. You know that the Associated merely went out and wherever they found a car marked "S. P." they painted out the "S. P." and put the "Associated" on?
- A. No. That was done in the S. P. Yards at Kern City.
 - Q. You know that of your own knowledge?
 - A. I do.
- Q. And wherever they found a car in the S. P. yards of Kern City they painted out the "S. P." and put the "Associated" on?
- A. No; the S. P. did it. The Associated probably didn't do it.
- Q. You swore just a moment ago that the Associated did that, didn't you?
- A. Well, I said "they," and when I used the word "they," I thought that would be—We were speaking about the ability of the railroad company to produce cars. Of course I have got quite an intimate knowledge of the conditions that existed at that time in Kern county.
- Q. In other words, you made a statement unguardedly that you didn't know to be true?
- A. No; I said "they." It was done by the Southern Pacific. The Southern Pacific painted off the "S. P." letters and put "A. O." on them. I didn't

see the painter that did it. I suppose he did it at the "S. P." instructions; but that was done.

Q. And you don't know, of your own knowledge, whether or not those cars were purchased by the Associated Company or not, do you?

A. I do not. No.

Q. And you don't know, of your own knowledge, whether or not those cars were originally bought by the Associated Company, do you?

A. I know that the authorities at Bakersfield stated that [250] they had a large number of cars coming, which, when they arrived, would be available for the use of independent producers, of which we were one, and that when they did come they were put into the Associated service. I know that.

Q. Will you kindly answer my question?

A. I will try to. What was it? (Last question read by the reporter) No; I don't know that.

Q. So, what you are stating is based upon hear-say?

A. Statements made to me by the officials of the company. I could not get it any other way.

Q. And whether or not those officials had any definite knowledge of the actual ownership or title, you don't know, do you?

A. I don't know to what extent they had knowledge; no sir.

Q. And yet you are willing, under oath, to state as a fact matters that you heard, without knowing whether they are true or not.

A. Mr. Mills-The government objects to that

question, because the witness has stated that he got his information from the officials of the railroad company.

Q. Mr. Lewers—The latter part of which objection will of course be available to the witness?

A. The statement that I made is a statement of the information that I got from the officials of the road, in regard to the cars. And as to the fact of the transfer of the cars, that I knew personally—that is, the changing of the lettering.

Q. And, based upon that information, you made your statement a few moments ago that the Associated went in and painted out "S. P." on the cars.

A. I didn't say so. I used the word "they." We had been talking about the transportation companies. The Associated, so far as I know, didn't paint any of the cars. I presume the S. P. [251] Railroad Company painted them.

Q. And you say that the Southern Pacific was using oil for fuel on its engines during that period?

A. Well, I didn't run an engine. I say, Yes. That would probably be general repute and hearsay; but it was using oil on its engines.

Q. You observed the engines shipped for the use of oil, did you not?

A. Tanks; yes. I have never been in a locomotive. I don't know how they are fitted.

Q. And it was commonly understood, was it not, and known by you, that the Southern Pacific Company was developing oil properties for the purpose of getting fuel for its own use?

A. Well, at that time I didn't know. I think that was before it did any active—I don't know what time it commenced active development, the K. T. & O. The Associated was actively developing for oil which, by common repute and the statement of the railroad people, was being used by the railroad engines.

Q. For fuel?

A. Yes sir.

Q. Now, you say that the depression in the price of oil existed all over the California oil fields?

A. It was general; yes sir.

Q. Now, was there any depression in the price of oil at points of consumption, during that period?

A. Yes, I think so; a very considerable depression.

Q. A very considerable depression?

A. I think so.

Q. Did the Associated Oil Company get any better prices for its oil than anybody else?

A. Not to my knowledge. I don't know what prices they got. [252]

Q. And you never heard they got any better prices, did you?

A. I never asked anything about it. Let me see. I don't know that they got any better prices than anybody else. They were able to deliver as nobody else was able to deliver oil.

Q. Nobody else was able to deliver any oil?

A. Practically not, by cars; no—that is, to deliver with any certainty. That is, the uncertainty

as to cars was such as to preclude any assurance, any certainty, of being able to deliver.

Q. And did the Associated have an absolute certainty of getting sufficient cars to deliver its oil?

A. I don't know to what extent it could get cars. Of course they had an absolute certainty of getting all the cars it wanted to deliver railroad oil.

Q. That is, the railroad was getting its oil for fuel?

A. Yes. That is, it had a certainty of getting cars to deliver railroad oil.

Q. By "railroad oil," you mean fuel oil for the railroad?

A. Oil for the railroad, yes; for use.

Q. Now, you don't mean to say that the railroad absolutely prevented any shipper, except the Associated Oil Company, from shipping oil by cars, do you?

A. Oh, no. No; they simply asserted they didn't have the cars. They didn't present them.

Q. What do you mean by "present?"

A. They simply didn't furnish the cars—stated they could not.

Q. And the railroad, during that period—not only the Southern Pacific, but also the Santa Fe line began to increase the number of tank-cars for oil, did they not.

A. They did.

Q. And that increase continued, did it not ? [253]

A. I don't know how long.

Q. Wasn't the number of tank-cars in use upon

the railroad lines in California vastly increased during the period between 1900 and 1905?

A. It was largely increased. I have no means of knowing how largely. Very largely increased, to my knowledge.

Q. And did not that increase permit the independent oil shippers to get their oil to market?

A. No.

Q. It didn't?

A. It permitted it to an increaseed extent, perhaps, but not to a sufficient extent.

Q. Then, have they ever been able to get their oil to market to a sufficient extent?

A. Well, I got tired of trying, after 1906 and '7—after 1907. I don't know what the condition has been since then.

Q. Then, since you quit you don't know what the conditions are?

A. I don't know what the condition would be at the present time, as to cars. Of course a large proportion of the oil is transported by pipe-line out of the fields. I don't know to what extent shippers rely upon cars. As I said, I got tired; I could not get them.

Q. There were no pipe-lines in 1901 and '02, were there?

A. No; I think not. The first pipe-line was out of the river field. I don't remember when that was built, exactly.

Q. Was there anything to prevent the construction of pipe-lines at that time?

- A. No; I think not. Not that I know of.
- Q. Now, on this occasion when you went back to New York with Mr. Beale, you say you met Mr. Harriman in his office in New York? [254]
 - A. Yes sir.
- Q. And you saw Mr. Porter, who was connected with the Associated Oil Company, sitting in Mr. Harriman's outer office?
- A. I think so. It was in the office. It was right in the adjoining office, I think.
- Q. I suppose that fact seemed to you full of importance, didn't it?
 - A. Not at that time. It did later, though.
- Q. And if you had happened to see some other individual sitting in the outer office of Mr. Harriman, you would have at once concluded, would you, that there was a conspiracy between that individual and Mr. Harriman to depress the price of oil in California?
- A. No. No; I just knew Mr. Porter. His visit there had no meaning to me at that time.
- Q. You, also, appeared in Mr. Harriman's outer office the same day, didn't you?
 - A. Yes.
- Q. And you say you tried to sell all of your West End properties to Mr. Harriman?
 - A. Yes sir.
 - Q. You didn't succeed?
 - A. No sir.
- Q. And, although Mr. Kruttschnitt went into the matter very fully with you and you explained the

situation as enthusiastically as you felt the facts warranted, nevertheless they would not purchase?

A. I didn't say "enthusiastically." I mentioned it; I made a full explanation to Mr. Kruttschnitt, answered all his questions, and made the fullest showing that we could.

Q. And yet they didn't buy?

A. They didn't. [255]

Q. Now, I understand you to testify that the Associated people delivered large amounts of oil to the Southern Pacific Railway Company. Is that the fact?

A. Well, you would probably say that was hearsay. I was so told by the railroad officials at Bakersfield.

Q. Did any railroad official ever tell you that they delivered a single tank-car of oil to the Southern Pacific Railroad Company?

A. Why, yes. The train dispatcher used to tell me daily the number of cars that had to go for the company.

Q. Which company?

A. Southern Pacific Railroad Company.

Q. You are sure it was not the Southern Pacific Company?

A. Well, I understood the "Railroad." He said "Company oil, railroad oil."

Q. That is what he said?

A. Yes.

Q. Then he didn't say "Southern Pacific Rail-road Company" oil?

A. No; I don't know that he did. Of course there was no occasion for him to say. It was Southern Pacific Railroad—it was oil for use on the railroad.

Q. Then why did you testify that it was delivered to the Southern Pacific Railroad Company, so carefully?

A. Well, it was delivered to the railroad company, and it was the Southern Pacific, Southern Pacific's railroad.

Q. That is the way in which you reached your conclusion, from that method of reasoning, is it?

A. Why, yes. I had no other.

Q. It was delivered to the company which was operating the road, wasn't it, so far as you know?

A. So far as I know; yes sir. [256]

Q. And you don't know what company was operating the road, do you?

A. Well, I have a vague idea the Southern Pacific Railroad Company; but I don't know that the Southern Pacific Railroad Company has any railroad. If they haven't any, I don't know. That is, the Southern Pacific Railroad was very much in evidence. I supposed it was the Southern Pacific Railroad Company.

Q. That is, your idea is a vague one, as you said?

A. No. The Railroad Company, I said, was very much in evidence, and there never was any misapprehension or misunderstanding when the Southern Pacific Railroad Company matters were discussed between people, that I know of.

Q. No misapprehension at all?

- A. Not that I know of. I never had any doubt, and I was discussing with the Southern Pacific Railroad Company's employees and officials matters that affected the road, and I didn't have any doubt about it; never thought there was any question raised.
 - Q. Where were you living in 1904?
 - A. Bakersfield.
 - Q. And what papers did you subscribe for?
 - A. I subscribed for the local papers.
 - Q. Which ones?
 - A. I think both of them.
 - Q. Did you take the Echo?
 - A. I took it; yes sir.
 - Q. And you were a subscriber, were you?
 - A. Yes sir.
- Q. And in 1904 you still retained your interests in the locations in the Elk Hills, didn't you?
 - A. We had them; yes sir.
- Q. And you were interested in the oil situation generally, [257] in that you read items concerning it, I suppose?
- A. I looked through the paper generally, yes; but in a very casual way. I looked through the papers more or less all the time. I might not see every one, or all that was in it. I don't read the advertisements, usually.
- Q. You were at that time more or less familiar with the townships and sections throughout the country surrounding McKittrick, were you not?
- A. Oh, yes, in a general way. Of course if I was interested in any particular description I could eas-

ily look at a map. A newspaper description is not very accurate, as a general thing. Very rarely they are right.

Q. That is, a description in a newspaper item, you mean?

A. Yes; in the items that are given of development work, for instance, and that sort of thing, they are generally inaccurate.

Q. But if you saw an item that referred to the township and section, or quarter-section, in a country that you were familiar with, you would be able to place it, from your knowledge of the topography of the country, wouldn't you?

A. In a general way, yes sir. When I heard a township and range mentioned, I would know instantly what the country was. My knowledge of the country was sufficient to enable me to remember them.

Q. You never filed any protest against the application of the Southern Pacific Railroad Company for this land in 30-23, did you?

A. No sir.

Q. Although you were a subscriber to the Bakersfield Echo during 1904?

A. I was a subscriber, I presume. I don't know. I have taken the paper steadily right along. [258]

Q. Did you try to sell Mr. Harriman any land in the Elk Hills?

A. No sir.

Q. The land that you offered at that time didn't include your interest in the Elk Hills?

- A. No sir.
- Q. He might have purchased, if you had offered him that, might he not?
- A. I don't know, I am sure. It didn't occur to me.
- Q. You offered everything else you had in the West End, though, didn't you?
 - A. No, not entirely; no.
 - Q. What portion did you omit?
- A. There were some small interests in the McKittrick field.
 - Q. But everything else you offered?
- A. We offered the Sunset, yes. In the McKittrick field, we had some interests there.

Mr. Lewers-That is all. [259]

JAMES F. MC CAY, witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am 53 years of age, and reside two miles North of Fellows, upon the Pioneer Midway. I am a driller, and have followed that occupation and never done anything else since I was a boy, but the oil business. I have drilled since I was old enough to start drilling. I am now employed as a driller by the Associated Oil Company. I have been in their employ pretty nearly seven years; that is, the Amalgamated and different companies—all associated, I suppose; been under one management. I have been drilling, continuously, oil wells for 25 or 30 years. It is a part of my present occupation to go to and remedy any troubles with the wells belonging to the

Associated Oil Co., wherever they send me; that is to a certain extent expert work.

I know the Associated Oil Co. is operating in what is known as the "Elk Hills" East of McKittrick at the present time, and that that company has brought in wells which are producers in that country. I should judge the first well that produced was brought in about 9 or 10 months ago: something like that: nearly a year. I am not thoroughly conversant with the sections, from what they tell me that well was on Sec. 26, T. 30, R. 23. I saw that well: it was drilled with a rotary drill. I did not see the well at the time it was brought in. They had done some more work afterwards on it before I saw it last. They did some work after I had seen it, but it was flowing some oil at the time I saw it. I could not say how long it was before I saw it that it started because at the first time I saw it I went there to do some work on it, and at intervals of every 20 or 30 minutes or half an hour, it would flow some oil. It might have been four or five months; something like that; three or four months: I don't just recollect the time which had intervened between the time I saw it and the time I afterwards found it producing. I was not there when it was [260] put on the pump. Shortly afterwards I just passed it, but did not pay much attention to it. I could not say what the production of the well was per day at the time I was there, for I never took measurements of this well on 26. I did take measurements of a well belonging to the Associated Oil Co., in the Elk Hills on Sec. 30. I think it was in T. 30, R. 24. It was east of the well I have first referred to. I was there when the pump was first put on that well, and measured the oil flowing from it when I was there. We had been working with it. I had charge of the well, at the time, perforating it and getting it to produce and I had probably been over there maybe four or five weeks working with it, bailing it, before we put in the pump. We put in the pump and it had been pumping, I think, a couple of days when I took a gauge of it. Pretty near 800 feet of the casing was perforated I believe, at depths of somewhere in the neighborhood of 3600 or 3700 feet up to 2700 feet. The perforations were put in to catch the oil. That well increased its rate of production from the time it was first put on the pump up until the time I gauged it. That is as far as my knowledge of its increased production went. After I gauged it that time I have not been there since and have not seen the well since. When I put it on the gauge it was producing at the rate of 406 barrels a day as a maximum up to that time. Of course, I could not say that it had gradually increased or what amount it had increased per day. When we first got it to showing oil, it would flow every once in a while, and going into the sump hole, we would not take much gauge of it. I do not think, at the start off, it would do much more than 50 barrels a day. That is about what we estimated it for a while until we got it on the pump. Of course, we could not get the oil out of it with a bailer as fast as we could with the pump. After we put it on the

pump it gradually increased in volume; for two or three days it kept getting better. Its increase in volume [261] can be explained by the fact that by putting it on the pump the pressure was released from the inside and took more fluid out of the inside of the casing and gave the oil a chance to come in through the perforations.

That well was drilled by a rotary drill, with which you force liquid mud or wet clay down in the casing and up around the sides. In drilling with a rotary drill, it is pumped into the side of the drill pipe and forced up around the walls on the outside. The purpose of that is to plaster the wall to keep the wall from caving. That pressure in the pipe is sufficient to force the mud up around the outside of the casing. Of course, in forcing that mud with the rotary up around the outside of the drill pipe, there is not any casing, as a general thing, but just as the bare walls of the well. As the bit cuts it away, it leaves the bare walls and the mud is forced around to wall that up, the same as plaster. We call it "plastering it up." When a well is first put on the pump, the perforations having previously been made, some of that plaster is still in the crevices, forced around the walls; and it loosens up, and sometimes, if the gas pressure is not great enough to force it out, it sometimes takes a long time to break the plaster off. If you have good gas pressure it may break into the wells and force it into the casing and you can pump it out and release it. There is a tendency for the production to increase as the plaster gives way under the pressure.

From my judgment of the conditions there, and my knowledge from an experience of 25 or 30 years, I think that well would be a better well if it had not been drilled with a rotary there is so much mud plastered in the walls of it. I don't think the well had a good chance to show what it really would be. I would think from my experience with rotaries that there is more oil back of that reservoir than is actually indicated by the present production of the well. I regard a well which produces 406 [262] bbls. as a pretty good well. From the conditions I saw and my knowledge of the territory and from my general experience in the oil business, I considered it a very good well; I thought the prospects were pretty good.

Up until the time I was there the Associated Oil Co., bad brought in only two wells in the Elk Hills that had produced any oil. That was this well on 26 and the one on 30. There may be other wells there now. I believe there is one on 24 that was drilled down, but I did not visit that well; I was only just in sight of it; never went down to it. It is located below the hills. All I know of it is by hearsay.

CROSS EXAMINATION OF JAMES F. MC CAY.

I did not say that the well on Sec. 30 is now producing 400 barrels a day; I do not know what it is producing, because I have not been to it since the day I took the gauge of it. That gauge was taken after the pump had been on two or three days. Hav-

ing the pump on in a well drilled with a rotary would have a tendency to relieve the pressure from the inside of the casing and let the oil flow freely in through the perforations. Of course, the least pressure there is on the outside of the casing, the better vent the oil, or whatever is back of it, has got to come through the perforation it will let it come. It ought to remove part of the plaster. The relieving of the pressure on the inside and keeping the fluid out of the casing, in my opinion, would have a tendency to make it produce more oil. I do not know whether the production of oil from that well afterwards dropped off. All I know would be just from hearsay.

Q. (By counsel for defendants) "You have heard, though, that it did, didn't you?"

(By Mr. Mills, counsel for plaintiff) "We object to that."

A. I heard that it was not doing as well. I could not say that the production dropped down to less than 50 barrels, [263] because I never was informed. I could not say as to the real production of it. It is common to find wells that show heavy flow at first and then diminish quite materially. I did not have charge of the drilling of this well and have no knowledge of the formations through which it passed. All that I had to do with it was to bail it out and perforate it. I was sent there to perforate it and get it to producing. I was able to ascertain to a certain extent at what point the oil began to flow in that well; at what depth, in making the perforations. I believe there was one place—I don't

know; I think it was along about 3200-that when we perforated it at that point it showed a little more oil; and then again at 2700 feet, it showed still more after the perforation. I could not tell from that whether or not the oil came in from oil sands adjacent to the 2700-ft, level or somewhere below. No man can tell that. I have seen oil pass up around casing clear to the top of the hole. In perforating a well, you are unable to determine exactly at what point oil is actually coming out of the sand. If you have not kept a log of the well and know where you got the sand, and everything, in the drilling part of it, of course, in the perforations you cannot tell exactly where it come in. That can be best determined in the course of actual drilling itself. I am not in a position, from my observations of that well to answer the question as to what point oil is coming out of the sand. They had some trouble with the well in Sec. 26. I really forget just at what depth, but they wanted to take the 41/2" casing out, they had twisted off the drill pipe below and they could not go any further with their rotary, and they wanted to take out the 41/2" casing and sidetrack this drilling pipe, or portion of the 41/2" they had left in there, with the standard tools so as to make a clearance for the rotary to go ahead of it, and so I went over and jarred the string of 41/4" casing out and took it out and [264] then put in the standard tools and side-tracked the casing that was below so that they had a clear hole about 20 feet below the top of this obstruction that was in the hole, to go

ahead with the rotary. I couldn't say what the depth of the well was at that time to be positive. It was somewhere in the neighborhood of 3700 or 3600 or something like that, but I couldn't say as to the actual depth. Every once in a while while I was working with it, oil would flow up-every half hour or so. It didn't flow water. It just acted as though the oil would come up through the water and when it would get a certain amount on top of the water it would flow that oil out. At the time I was there the well was still filled with water and all the oil that was coming out was just what oozed through this water. It has been five or six months, something like that, since I was last at this well on Sec. 26. I don't know its condition now and am not familiar with the log of that well.

REDIRECT EXAMINATION OF JAMES F. MC CAY.

I have heard of W. S. Porter, of the Associated Oil Company. I don't know him personally. I believe he is general manager, Vice-President and general manager. I cannot say whether he is a competent oil man. He must be competent if he holds the position he is in. [265]

J. W. KAERTH, a witness called and sworn on behalf of the plaintiff, testified as follows:

I reside at Colusa, Colusa Co., Cal. I am a surveyor and civil engineer by profession, and am, and have been for about 24 years, County Surveyor of that county. I was employed as a subordinate un-

der Mr. Duee at the time that the Government survey was made of a portion of the lands in T. 30 S., R. 23 E., M. D. M., Kern County. While so employed, I was running the instrument. I was there with Mr. Duee. Spent about two weeks there then. To my recollection, our camp was in, I think the NE1/4 of Sec. 33. Plaintiff's Exhibit E, examined by me, is a map of the survey, and our camp was on the NE1/4 of Sec. 33, shown on that exhibit. At that time I went over that portion of the land that is shaded on that map. The land is included in survey No. 881, I believe. We found evidences there of oil, asphaltum. We called, it, for want of a better name-we called them asphaltum reefs. They had the appearance of ridges. We didn't know what they were at first. To my recollection those alphaltum reefs or ridges, as we called them, were rather plentiful; over the central part any way. Around near our camp there were plenty of them. I remember the main ridge or summit line of the hills over there. My recollection is that these asphaltum reefs or ledges showed up along the summit in quite a number of places. We removed some portions of these asphaltum reefs, or ledges, while we were there. How we come to remove them or dig out portions of themin the first place we were using posts for corners, and we wanted to use rock if we could get it and we took these to be rock ledges. We sent our camp man out one day to see if he could not dig up some of that rock that we could distribute and use for corners. That evening, when he came in, he came

over and said it was not rock at all—it was tar. I went and looked at it and found it was hard cakes of—we called it asphaltum. We used to burn it for eamp [266] fire. Used it for fuel. It would burn all right. We would have to use some twigs, brush or something, to start it. After it was started it would burn. We could not set it afire without using other means to get it to start.

We found mineral location notices on the land that was surveyed by us at that time, in T. 30, R. 23. There seemed to be notices pretty much all over the land. We found corner posts setting pretty much all over the land with notices, and a great many of these notices were just written and folded up and placed under a rock on top of the monument. We found a few stone monuments there marking the boundaries of claims, where there was any stone to be had. There was not very much there. I remember two or three small oil seepages on the land, what appeared to be oil seepages, small places on the land. I did not consider the land of any value for agricultural purposes. It was poor, very rough and precipitous and cut up badly by gulches, ravines and there was no water on it. We had to haul our water from McKittrick. At the time I was there there was no vegetation whatever, except small brush, sage brush or something of that sort, to my recollection. Of course it was in the fall of the year, before the rains. There was nothing growing on the lands, though, at that time. On the west side of the tract there were a couple of cabins. We did not go right to them, but I could see they were building something there. They told me they were building oil derricks. I could see they had new lumber there and were putting up some sort of a structure. The farthest one south, when we left, was getting up apparently 20 or 30 feet high. These were along the west side of T. 30 S., R. 23 E., on a portion of the land we surveyed.

CROSS EXAMINATION OF J. W. KAERTH.

The cabins and derricks were along that tier of sections [267] 19, 30 and 31. 31 was not covered by that survey, but about 18, 19 and 30, or somewhere along there. I could not say on which of those three sections they were located; but just the way I could picture it now, I would say probably in section 18 and section 30, I may be mistaken about that. We closed in section 18. I think section 18 was surveyed before that. We closed in on those old lines. The upper one of the cabins and derricks might have been on section 18. The lower one, I think most likely was in section 30, I could not say on what portion of it, I think possibly-I would not attempt to say, but I believe, though, in the southern half of it. As I recollect it it was nearer the west boundary than the east boundary of the section. That would put it in the SW1/4. I may be mistaken about it. That was not in the old survey. Sec. 30 was covered by our survey. We run the whole section. We had to trace all of the lines and run the whole section. Possibly the SW1/4 of Sec. 30 had been surveyed before, in

420

1955, I don't remember. That survey had possibly been accepted, I don't remember. I know there were some portions of sections had been run. I know 31 had been run out, and Section 13, and some of those. My recollection is we spent about two weeks in that township, and during that time I was thoroughly over that township. During that time my attention was confined to the survey of that township, and in the course of that survey I had occasion to go to every portion of the township covered by that contract made with Jas. M. Duee, in 1901. My recollection is we completed the survey near the middle of December. To the best of my recollection our camp was in Section 33 of that township, and on the south slope of the Elk Hills. I found evidences of oil and asphaltum over a good portion of that township. I found those ridges or reefs. If I were going to describe them as they appeared there, I would say that they had very much the appearance, as I remember them of an ordinary ledge of sand-The surface of them was a [268] sort of gravish color. As we broke into them they were quite black, but the outer surface was gray. material would burn. We did burn it in our camp fires. We did not dig out any except near the camp. We did not have to go very far to find plenty of it, and we dug it out around there and used it, but as I remember it, we saw it appear pretty much along the summit at different places all along. I cannot say hardly how many places. We saw it in a great many places, but just how many would require a rather wild guess to specify the number. I would say we found it in more than a dozen places. I would say that what we took out was in sections 33 and 34, in the NE1/4 of Section 33, because we found it right close to our camp, and in the NW1/4 of Sec. 34, because it was closer to our camp. As I remember, the cil seepages we found there, one of them was in either section 25 or 36. The other was up in 17 or 2- of Tp. 30, Range 23. If I were going to specify where we found the oil seepages. I would say near the south line of Sec. 17, and near the south line of 25. I was going to say that whatever we found was usually close to the section lines, because we did not get off the lines very far. We were not interested in anything but running the lines and did not go off the lines very far. Whatever we found was necessarily pretty close to the lines. According to my recollection, the oil seep in 25 was in the NW1/4. I remember it as being near the SE1/4 of Sec. 25. That oil seep was just a small spot there in the bottom of the gulch, in a depression; just a small black spot in the soil, that had the appearance of oil. I was going to say it had the smell and appearance of oil. The asphaltum reefs were hard. The oil seep was soft; it was not hard like the other. I was last on the ground when I left that survey, and have never been back since. I don't think I could be mistaken as to the existence of these asphaltum reefs at the places I have indicated, although I am giving it entirely from my memory of nearly 11 years [269] ago, I think I have them correct. There is what I call oil seeps in that township. Of course the oil was not running out there as water would run out of a spring, but the sand was black and had the smell of oil. We all noticed it and talked about it at the time, but the oil was not coming out like water would come out of a spring, or anything like that, but we called them oil seeps. An oil expert might not call them oil seeps. I don't know. I would be willing to go out on Tp. 30, R. 23, with the representative of the Defendant's company to see if I could find what I considered oil seeps and asphaltum reefs at that time. I can find the reefs. I know they are there. As far as those seeps are concerned, they might not be considered oil seeps by an expert, but that is what I call them. I have described all the indications I found in that township. Mr. Duee was present during that survey. He followed up and set the corners. I ran the lines and set temporary corners and he followed up and set the permanent corners and followed me up afterwards. He was engaged in active work in the field. I ran the lines and made the preliminary notes in the field. I then afterwards transferred the notes from those rough field books onto another book, in pencil, and turned them over to Mr. Duce. That is the last I ever saw of the notes. I had nothing to do with the final form of those notes, as turned in to the Surveyor General's office. I wrote them up-just exactly what I had done in the field-and Mr. Duee would give me the kind of corner that he had set afterwards and I embodied that in the notes, then turned the notes

over to him and never saw them afterwards. In the notes I wrote the general description of the land. When I turned over this pencil copy, I wrote the general description following, which is always to follow the survey. I characterized the lands as mineral. That was done by reason of what I observed on the ground, in the way of asphaltum reefs and oil seeps. That was my reason for characterizing them as mineral. I found location notices scattered through all that territory. [270] I did not see any one actually engaged in mining of any kind in that township. The only persons I saw were the ones at these two places I have spoken of where there were signs of buildings, and while we were camping there I think I saw two or three rigs go across. There is a ridge going across the township, which I think is shown on the map; and I saw two or three rigs cross about that ridge, but they did not seem to stop for anything, they went right across the country, they were apparently going beyond that or elsewhere. I saw no actual drilling operations going on anywhere in that township or any mining operations of any kind,

Q. Did you find any persons mining at any place in that township?

A. No sir.

Q. Could you, Mr. Kaerth, spend the time to go out to the Elk Hills immediately and make an examination?

A. What is this? Wednesday?

Q. Yes.

A. I think so.

Mr. Lewers—Very well. We will be very glad to make the arrangements. That is all.

Mr. McCormick-That is all, Mr. Kaerth.

Mr. Mills-That is all.

J. B. TREADWELL, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I live at Tropico, Los Angeles County. I am 66 years of age. From the spring of 1893 until the summer of 1903 I was employed by the Southern Pacific Co., in developing and producing oil for them. It was in Summerland, Kern River and McKittrick where I carried on the principal operations. My duties[271] extended to the Coalinga field. I knew Mr. Collis P. Huntington in his life time. I knew H. E. Huntington and Julius Kruttschnitt. I knew each of the three during the period I operated in the oil fields above indicated. They were my superior officers and I acted under the orders of each of them at different times during all the time; that is, subsequent to that Mr. Hays came in as president and then Mr. E. H. Harriman, in that period. Mr. Hays came in on the death of Mr. Huntington and tock his place, and it is my impression that he continued in it about a year. I ceased operations in Kern Co. in 1903, and during the summer of that year went to Alaska under contract wth the S. P. Co. E. T. Dumble took my former place with the company, in addition to his position as geologist of the company, and continued to do the work that I had been doing previous to the time he took my place.

I knew Josiah Owen. He seemed to be in Mr. Dumble's employ. Mr. Dumble had been geologist for the Company before he took my place. I don't know how long. I knew he had been geologist since, perhaps 1901 or 1902. I was in the employ of the Company at that time. Later, I met Mr. Dumble in Oregon. He told me he was looking up some coal deposits, examining them in Oregon, near Bedford. I don't know whether it was on Government land or other land. I understood it to be in connection with the Company that he was looking up these coal lands. I was in the employ of the Company at that time. I did nothing there in Oregon in connection with the coal lands at that time, further than that he wanted me to go out with him to the place. They had some paraffine they had discovered under a lava deposit, and they had been selling it for bees wax. The people up there did not know what it was. It was about eight miles to the East of Bedford, about eight or ten miles from the railroad. That was before I severed my connection with the oil region, in the San Joaquin valley. Mr. Josiah Owen was with Mr. Dumble at that time. That [272] was the first time I ever met Owen.

During the time I was employed by the Company in the Kern River, McKittrick and Coalinga fields, as I have indicated, I don't know, really, who had charge of the withdrawing of the railroad sections, the odd railroad sections, in those fields from sale, any further than this: I wrote to Mr. Madden whenever I wanted any lands withheld. I did this under instructions or directions from either Mr. Kruttschnitt, Mr. H. E. or C. P. Huntington. When orders of that kind were given, or letters, of a character I have just mentioned, were written to Mr. Madden, they were complied with as far as I know. Mr. Madden's Christian name is "Jerome", and his headquarters were in San Francisco. He was the manager of the Land Dept. for the S. P. Railroad Co., during that time or a portion of that time. I was frequently in his office during that time. The two Huntingtons and Kruttschnitt were Madden's superior officers. In one instance, as I know of my own knowledge, instructions were given by C. P. Huntington to Mr. Madden with respect to the railroad lands, that is, the odd sections of railroad lands that had been patented to the railroad in oil districts. That was when Mr. Madden had objected to my asking for the withdrawal from sale of so much lands. Then I was sent for to meet at Mr. Huntington's office. Mr. Huntington asked Madden what his grievance was, and he stated that they had opportunity to sell the lands and that I had withdrawn from sale large blocks. He wanted to know who wanted to buy the land. They did not seem to know exactly. I was asked, and I told them I supposed they were buying them for the oil indications, that is, for oil lands. If they had bought lands that way from the railroad, they would buy cheaper than they would from the Government; they would get it for \$2.50 per acre, 20% down and the balance to be paid along under their contract, and then the question arose if I was not with-[273]-drawing more than there was oil in. I told them I didn't know, that I was with-drawing enough so as to be sure to take in all that did carry any oil, and even more. So Mr. Huntington told him that on instructions received from me, to withdraw the sales.

I could not say exactly how much land I withdrew during the period I was employed with the Company, in 1899 until left there in 1903. I think in the neighborhood of perhaps 150,000 or 200,000 acres. I recommended these withdrawals on account of the fact that there might be oil there and to give them time to develop and see whether there was oil there or not. They could get just as much for the land after they found out there was not any oil in it as they could then.

In answer to a question as to what experience I had at this time, or up to this time, with oil lands, formations, and the value of lands for oil, I would answer I have been with the Union Oil Co., and Pacific Coast, and others—making surveys of topographical and geological features for the purpose of locating their territory, and also I was deputy United States mineral inspector and surveyed a great many mineral claims or oil claims for patent. I have had ten or fifteen years experience in oil fields, which covers geological experience. I had experience as an oil man in the Texas field prior to the time I severed my connection with the San Joaquin valley.

In answer to the question as to what I had to do during that time I was in the employ of the Company with reference to the leasing or sale of railroad lands, the odd numbered sections, I would answer: "Frequently an order came out to me-well, it was principally in Coalinga, suggesting that I name the condition, the shape of the land to be leased. Those I made my report on and returned either to Mr. Kruttschnitt or to Mr. H. E. Huntington. So far as sales were concerned, there was only one sale made, and that was in the Kern River. Mr. Havs wished me to pass [274] on the value of one section, or part of a section there, that the Standard Oil wanted to put their oil tanks on." I do not remember what section the Standard Oil Company wanted to buy. It was in the SW portion of the Kern River field, and the tanks are there, I think, today. It was a railroad section obtained by patent from the Government, under the railroad grant. The lands referred to as railroad lands which I ordered withdrawn, under instructions from H. E. Huntington, C. P. Huntington or Kruttschnitt, were lands that have been patented to the Railroad Company under the Act of 1866.

In pursuance of instructions given me, or in the line of my duty, I withdrew lands in the vicinity of McKittrick, but I never worked any of the lands of the Company in McKittrick, that is, of the railroad lands. The most of the lands I had asked to be withdrawn along there had been acquired—that crude oil—by the Buena Vista and the North Buena

Vista, and the Company known as, I think, The Georgia Oil Co.,—the Union Oil Co., of Georgia. They covered pretty nearly all of the seepages upon which -were shown, then in McKittrick. I withdrew, or reported and requested the Southern Pacific officials that there should be withdrawn a large quantity of land in the vicinity of McKittrick. That was in 1899 or 1900. I think I requested the withdrawal of the sections in the vicinity of McKittrick at one time. In requesting the withdrawals I took a map issued by the Kern Land Co., or Kern Valley Land Co., whichever the name is, and colored the odd sections that I wanted withdrawn from sale and forwarded that to Mr. Madden. The odd numbered sections thus colored would extend from three or four miles north of McKittrick down to Midway, then included Midway on to Sunset. That might not have been in one notice of withdrawal from sale. It might have been in two, and the request might have been as late as 1902. I would not be at all surprised if the second was in 1902. I [275] think I made less than half a dozen recommendations for withdrawals altogether. I sent them to Mr. Madden. I had nothing to do with the leasing or sale of railroad sections in the different fields,-I mean sections patented from the Government under the act of 1866, other than the withdrawals I have already spoken of, except when I was asked my opinion and to decide under what royalty they should be leased, and the form of the land in a subdivision. I did not execute the leases. Those instructions came from Mr. Kruttschnitt or Mr. H. E. Huntington and I made reports on those things to them. I was consulted with reference to those leases during the whole time after they commenced to make leases, and I think they first commenced to lease about 1899 or 1900.

In answer to the question as to whether there was quite an effort on behalf of oil corporations and persons to either lease or purchase railroad sections in the Kern River field for the purpose of developing them for oil about that time, I answer: "The Kern River had all been purchased before I asked for any sales to be discontinued, with the exception of a portion of Section 3 and the section afterwards sold to the Standard Oil Co., and another piece which was afterwards leased to some parties to drill on and which they failed to get anything on." I had been out there on the ground, I guess, a month or six weeks before these sales were made. Had I known that there would have been a rush in there to have taken those, I should have asked to have the sales discontinued, but that all took place when I was at McKittrick and we only had two trains a week and I came into Los Angeles and found that they were purchasing all that land at \$2.50 per acre, and I telegraphed to Mr. Madden to withhold the further sales and it had all gone except these three pieces that I have mentioned

I think section 3 is in T. 28, R. 28. It was after-[276] -wards developed under my supervision and produced oil. My supervision of the development and production of oil on that land was by virtue of an employment with the Southern Pacific Co., which I have already mentioned. A portion of that section had been sold by the Company years before. In fact, all of it had been sold and foreclosed, bought and came back to the Company; the purchasers did not make the full payment. It was sold several years before the oil excitement. The oil produced on that part of section 3 that was developed by me was loaded on to the cars and shipped to different points on the railroad, as instructed by the different orders that came to me for oil. It was used by the railroad. I kept a set of books there. As to what charge was made to the railroad or to anybody for the oil that was produced and shipped, I would say all that was kept was the quantity of oil run into my expenses, and those were forwarded first to Mr. Kruttschnitt's office, while I was conducting the development and operations in my own name; and subsequently we changed it to the Southern Pacific and then my returns were made to the Auditor of the Southern Pacific. I conducted the operations on Section 3 in my own name for a time. The property did not belong to me, but I had been conducting other operations in my own name for the Southern Pacific Co. That was done because I first went to Summerland and bought some property there and then I went to Mc-Kittrick and got leases; and the object was that if the Southern Pacific was buying them they would have to pay a greater price, and if I was taking it up myself it would be a different proposition.

To my knowledge no charges were made against

the Southern Pacific Railroad Company or any one else for oil that was produced and shipped from section 3, either while I was operating it in my own name or when it was afterwards operated in the name of the Company. I could not say for a certainty who owned the title to the fee of section 3, upon which this oil was produced. I paid no rental or royalty when it was operated in my name, and [277] as to any other company, do not know whether rentals or royalties were paid. I was also engaged for the Southern Pacific Co., in the production of oil on what was known as the J. B. Treadwell lease, in McKittrick. It was not known as the S. P. lease. It was a lease that I took in my own name, and operated in my own name, the Southern Pacific paying all the expenses and receiving all the oil. I was acting for the Southern Pacific. It might have been afterwards called the S. P. lease, later, when it became changed over to the returns and operated openly by the Southern Pacific. That lease was not operated on railroad lands. It was operated on lands patented to the Buena Vista Oil Co. It was on the SW1/4 of the SE1/4 of Sec. 20, T. 30 S., R. 22 E. There was another property at the north, what we called the North End field, on the North Buena Vista patent. It was operated by me for the Southern Pacific The Buena Vista and the North Buena Vista Companies owned the title to the lands upon which those developments took place.

I got the data or information upon which I made my reports respecting the withdrawal or leasing or sale of railroad land in Kern County by just being upon the ground looking over the country generally. I got it from personal investigation. I had maps of all the different fields, and I kept those records up as to the depth of wells, sand, etc., they passed through, the quantity of oil produced. They might say these records belonged to the Southern Pacific Co. I was not required or asked to keep those records and maps. After I left, I think I had a duplicate of about everything that I had in the field, and those were destroyed. The balance were either left in the office or they were in the general manager's or the president's office, of the Southern Pacific.

I took Mr. Dumble over the oil fields in Kern Co., at the time that he came there to supercede me. I went with him, [278] spent several months there off and on to go with him over the field and show him everything that was being done. Mr. Owens was not present. He might have been in his employ, but he was not present. I think that was early in 1903.

CROSS EXAMINATION OF J. B. TREADWELL

I prepared maps showing the development of oil in the various operations in the territory in McKittrick. My duplicate maps were destroyed at my residence in San Francisco during the earthquake and fire of 1906. I had my library and my cabinet and everything there, field notes, running back for a great many years and the time my house was destroyed they were destroyed with it. The originals

434

of those maps were probably sent to some of the officials of the Southern Pacific Company. I was emploved by the Southern Pacific Company. I was never employed by the Southern Pacific Railroad Co. I never had anything to indicate that I was emploved by the Southern Pacific Railroad Co. My letters and all were in connection with the Southern Pacific Co., headings and all. The Southern Pacific Co. was operating the railroad in Bakersfield at that time. I was employed, and it was one of my duties to get oil to use as fuel on the line. The Southern Pacific Co. began to use oil as fuel before I went with them. I was engaged in the oil business in Summerland, and I sold them oil before I wentthat was three years before. How much longer, I don't remember now, when they commenced to use oil. They didn't use oil as extensively then as they are doing today. Very little was used. The Southern Pacific Co. began its extensive campaign to procure fuel oil when they engaged me. That was in 1898 or 1897-I forget which-that I went there. Either early in 1898 or late in 1897. It was my duty to procure oil for the Southern Pacific [279] Co., for fuel on its road. When I went into McKittrick and also into the Kern fields, and elsewhere, it was for that purpose.

I had nothing to do with the examination of lands for the purpose of procuring patents for the Southern Pacific Railroad Company. I had no connection whatever with that. On various occasions I had submitted to me the question whether certain lands already patented to the Southern Pacific Co., should be sold. When these questions were submitted to me, my attention was directed to the matter of the oil in the land. That is, not in all cases, but at Coalinga that was true. There were no applications that I remember of at McKittrick for the sale of any land; that is, no orders to me to make any applications. I made blanket withdrawals of lands near McKittrick from sale. I know the Elk Hills. None of my withdrawal orders took any portion of the Elk Hills.

Q. "Why not?"

Mr. Mills (Counsel for plaintiff)—"Objected to on the ground that it is irrelevant, incompetent and immaterial and not cross examination."

Q. BY MR. LEWERS (Counsel for defendant)

—"Why didn't you, Mr. Treadwell?"

A. "I had been over in the Elk Hills on some location notices that I had been interested in, that is, my name was put down."

MR. MILLS—"I desire again to renew the objection that it is not cross examination; and I desire to notify counsel that any new matter that is brought out by this witness on cross examination—that in that respect the witness will be treated as a witness for the defense, and we will claim the right, if we see fit to exercise it, we will claim it anyhow to impeach the witness as the witness of the defense."

MR. LEWERS (Counsel for defendant) after responding to the [280] above, said: "Complete your answer." A. "After seeing the land I did not consider it worth doing the annual labor on, and did not

consider it, at that time, oil land of any value; therefore I never reported to the—asked to have that withheld from sale, for that reason."

Q. "I understand you to say that as a result of your examination made in the Elk Hills, you did not consider that land as of any value for oil."

MR. MILLS—"It may be understood that my objection goes to all this line of examination."

MR. LEWERS-"Yes."

A. "That was my conclusion at the time." The reason that my name happens to come on the location notices referred to is that several of the drillers had been over and had an idea it was oil land and suggested that I join with them in making the location. I said "All right, go ahead." They made the locations and then I went over afterwards to see, and as a result, concluded that I didn't want it and made no attempt to keep up any of those locations. I do not know whether the locations were ever recorded. I don't remember.

The lease referred to, near McKittrick, from which the Southern Pacific Co., obtained oil, was on land patented to the Buena Vista Oil Co. There was no lease and no oil developed and used while I was there from any land belonging to the Southern Pacific Co. I mean the Southern Pacific Railroad Co. I do not know anything about what charges were made by the Auditor of the Southern Pacific Railroad Co., against the Southern Pacific Co., for any oil. I don't know how the books in San Francisco were kept. As far as my office was concerned, or my duties con-

cerned, it was one of my main duties to look after the production of oil for fuel. In the course of the performance of my duties, I had occasion to examine surrounding territory quite [281] carefully and aimed to be—I think I was familiar with the general oil situation in the vicinity of McKittrick up to the time I left there.

I don't remember any discussion or any talk in McKittrick as to the Elk Hills. It was not considered promising oil territory at that time. The locators who went in there, as far as my experience is concerned, were simply oil drillers and working around the oil fields. They did not do any actual development work that I know of. That territory was not developed in any way, or prospected in any way, by competent oil men while I was in McKittrick.

In the various fields where I was employed I advised the withdrawal of a considerable amount of land. In doing so, I did not determine that each and every acre of the land withdrawn was actual known oil land. I followed the system of taking the trend of the oil and located enough so as to be sure to go far enough on the dip to include all the oil that they, in the future, might develop, and even further. I made a liberal allowance for future probabilities. I did not include any part of the Elk Hills.

In answer to the question as to what was the general belief and understanding, at the time I was employed at McKittrick, as to the depths to which an oil well could be economically sunk, I will say, when I

first went to McKittrick we did not think of going more than 400 or 500 feet and up to 1000. The oil territory generally through the State was small wells. Very seldom got a 100 barrel well and the sinking of deep wells, going out on the dip of the strata, is a subsequent operation, and has been followed out, or felt out, by going next the apex; drilling a shallow well and then going out deeper until they have gone to as deep as they could go, I suppose. In 1904, in considering the maximum depths that we could sink a well and get any profit [282] from it, we did not calculate to get over 1000 feet or 1200 feet.

Q. "Well now, if you had been advised at that time that a well—oil could be found at a depth of over 3000 feet, would you have recommended development of that well?"

MR. MILLS—"Objected to on the ground that it is irrelevant and immaterial."

A. "Not as long as we could have got shallow wells. It would all depend on the quantity of oil you could get out of the well."

If I had been advised that there was a prospect that I might get oil, but no certainty, at a depth of over 3000 feet, I would not have sunk a well.

I never informed Mr. L. G. Sarnow or Fred Sarnow that the territory in the Elk Hills was good oil territory. I don't remember a man named Duee. I cannot remember the name. May have known him, but don't remember. I never informed or advised anybody while I was operating in McKittrick, or

during that period, that the Elk Hills were good oil territory. If I had believed it good oil territory I would have got in and got some for myself.

REDIRECT EXAMINATION OF J. B. TREADWELL.

I never, during these withdrawals, recommended the withdrawal from market of any land in the Elk Hills. I may have included section 31, in T. 30, R. 23, in a withdrawal. I don't consider that in the Elk Hills. The map introduced as the Government Exhibit I, may show a small portion of it as being in the Elk Hills, if that map is correct. I could not say certainly whether I ever included that in any withdrawal. I am not prepared to say whether section 25, in T. 30, R. 22, is in the Elk Hills or not. I think both of these sections were included in patents to the Southern Pacific Railroad Co., at the time I was [283] in their employ.

Q. "Will you swear, on your oath, that you never included any of those lands in your orders to Mr. Madden?"

Question objected to by Counsel for defendants on the ground that "It is unnecessary excresence of expression on the part of counsel; and we object further, on the ground that he is cross examining his own witness on redirect examination."

A. I don't know whether those sections are really in the Elk Hills or not. They might be right in the foot hills or slope of the Elk Hills; and I am not prepared to state because I could not say what partic-

ular sections that I asked to be withdrawn." I don't know by sections any of the patented lands in the Elk Hills, belonging to the Railroad Company during the period of my employment, except the two I have named. I didn't go over the Elk Hills during the time I worked for the Southern Pacific Railroad Co., for the purpose of identifying the sections. I was pretty familiar with the patented lands of my employer, and I asked for discontinuance of sales, I withdrew sections, that I had not been on.

At the time I left the employ of the Southern Paeific Company I did not know, as a matter of fact, that the South part of T. 30, R. 23 had not been patented to the Southern Pacific Railroad Co. I made a map of the lands that were patented and I would not have made an order of withdrawal to Madden which included lands which had not yet been patented. I would not have included in an order of withdrawal the lands embraced in the patent dated Dec. 12, 1904, and the fact that they had not been patented would be a sufficient reason for my not doing so. I don't know positively now, as a matter of fact, that I asked the withdrawal of sections 25, in T. 30, R. 22, and Sec. 31, in T. 30, R. 23, and could not tell whether I had done so unless I had the original maps before me, that I made at that time. [284]

I don't remember that I knew a man named Thomas J. Griffin. He didn't work for the Arroyo Bravo Co., under me in Texas, because we didn't have the Arroyo Bravo Co. That Company was created after I had given up Texas. I have no recollection of having written a letter to him, at his home in Texas, after I returned from Texas, sending him a map of the country extending from Sunset to Mc-Kittrick, including the Elk Hills, and asking him to organize and come up there and locate the even numbered sections between the Railroad sections, in the Elk Hills, and I don't believe I wrote any such letter. I never wrote to Mr. Griffin or any other man, sending maps of this country, stating that the Railroad Co., owned every odd numbered section included within the maps, that all the lands were mineral; that they had yet lands to be patented which were mineral, and which I knew were mineral, in the Elk Hills; and that I wanted them to come up and organize and locate those lands.

I am not now riding on a pass of the Southern Pacific Co., or the Southern Pacific Railroad Co., and have not had such a pass since the law of the State of California prohibited riding on passes. If that law had not intervened, I would, no doubt, be still riding on such a pass; and I feel that I would be entitled to it, in consideration of the money I have made for the Southern Pacific.

I may have gone, in company with John Jean and L. G. Sarnow, into the Elk Hills to discover, or to examine a previously discovered oil seep on the NW½ of Sec. 32, in T. 30, R. 24, but I don't remember of seeing any seepage. I know I went out there, I think, with either one or both of them, I don't remember whether I went with both or one of them. When I went out, I went from my own camp at Mc-

Kittrick. I don't remember seeing any oil seepage.

Q. "Did you give any opinion at that time?" [285]

A. "I don't remember the particulars, whether I got off my horse or not. The country, at the time we went out there was bare—some sage brush—the grass had all been eat off and you could see the formation as you rode over it." I don't remember that at that time I expressed any opinion to Mr. Sarnow as to the possibilities of oil in that country. If I did, I said it was no good, in my opinion. I paid my portion—I may have paid all the expenses of the locations in that vicinity, in which I and Mr. Sarnow and Mr. Jean located a number of sections of land.

Q. "Was that because it was no good?"

A. "No."

RECROSS EXAMINATION OF J. B. TREADWELL.

I paid for hiring the horse to go out there and recording. That would be all the expense, it would amount to nothing. I was never called on to pay anything for development or location work. I had in my possession maps and data showing the land that was actually patented to the Southern Pacific Railroad Co., in that vicinity. The line of the withdrawal ran generally west and southwest in the flat valley to the south of the Elk Hills. I was subpoenaed in this case, as a witness, April 19th, this month. When I was subpoenaed I came here to the Court House

and had an interview with the Attorneys for the Government, Mr. Mills and Mr. McCormick, I was told this morning when I would appear as a witness in this case. I have had three interviews with the Attorneys for the Government. I was asked by them whether or not I had been employed by the Southern Pacific Railroad Co., and replied that I had only been employed, as far as my knowledge was concerned, with the Southern Pacific Co. I don't remember what response was made to me by either of them, when I told them that. I think they got all of that down. They had a shorthand reporter, who took down our conversation. There was nothing said with refer- [286] ence to Mr. Lewers, attorney for the defendant, in that conversation. They asked me whether I had held a conversation with Mr. Lewers, and I told them at the time I didn't know him. I had never met him. I never had any conversation with Mr. Lewers.

REDIRECT EXAMINATION OF J. B. TREADWELL

Before I appeared on the stand today I had had a conversation with the counsel for the Railroad Co., or some of its representatives, not exactly as to what I was to testify about here. They interviewed me on some of the questions, they wanted to know if I had been over the Elk Hills. I talked with the defendant's counsel in court here. He wanted to know if I had been over to the Elk Hills and was familiar with that section. I told him I had only been over, I

think once or twice and rode over it, but I had been interested by being located in some locations there, but didn't consider it, after seeing the ground worth keeping up. I think he asked me if I had been employed by the Southern Pacific Co., or Southern Pacific Railroad Co. I told him the Southern Pacific Co. I think that conversation was last Monday. I was subpoenaed on the 17th, I think it was, and I think Monday was the 20th. I think it was the day after Mr. Mills asked me, or the same day that he asked me, if I had met any of the counsel for the other side. That conversation took place in Judge McKinlev's office. He telephoned me to come there. When I got there I found that the counsel, that is in Court here, there, Mr. Lewers, Mr. McKinley came in afterwards. No one else was there-there might have been some clerks, but no one was present during the conversation. The conversation might have lasted ten minutes. I did not volunteer to go there. It was proper, nothing wrong to go there, although called as a witness for the Government. Nothing that I had to testify to but what any conversation with the other side would make no difference in my [287] testimony. It wouldn't make a particle of difference. I have got to tell the truth. I didn't tell Mr. Mills, at the first conversation I had with him, that the Elk Hills, in my opinion, was the best part of the oil territory in McKittrick field. He must have been mistaken in that. I didn't say that to him. I didn't say that I and Mr. Sarnow and Mr. Jean located there because of that, but that I didn't

keep it up because I had other interests and could spend no time on it. He must have misunderstood that. I do not think, if he will take his stenographer's notes, he will find any conversation of that nature. I had a talk with Mr. Gardner, one of the Government's Special Agents, the only conversation I had with him, he called on me at the California Club and asked me if I knew that country up there. He didn't say any particular section. And he wanted to know if I would kindly go up to see Mr. Mills. I don't think I had a conversation with Mr. Gardner in the office of the United States attorney during Mr. Mills' absence in Washington, with respect to the Elk Hills. I didn't have that conversation. I didn't have any talk with him elsewhere about the Elk Hills. Since the time he asked me to go up to Mr. Mills' office, I had a talk with him. He called up on the phone, and he had an album with a lot of pictures in it, and wanted to know if I could identify any of them as to the man who took them. My picture appeared in several of the pictures. I told him I I could not recollect and didn't, and I could not tell who took the pictures. Some professional man was making pictures through the field. I told him I thought Charles Canfield, perhaps, could tell him about it. I did not disclose to anyone representing the Government in this case, since my interview, on Monday, with Mr. Lewers and Mr. McKinley, that I had been in secret conclave with them with reference to the issues in this case. I kept that to myself. [288]

RE-CROSS EXAMINATION OF J. B. TREADWELL

The interview I had on Monday morning in regard to this case was entirely with Mr. Lewers. Judge McKinley came into the office, but was tending to other matters and went out. There was no suggestion at all made to me by Mr. Lewers, or any other representative of the defendant, as to what I should testify to or what I should not. I would regard such a suggestion, even if made by anyone, as totally unwarranted, whether it came from a Government representative or not.

REDIRECT EXAMINATION OF J. B. TREADWELL

I do not mean that any Government representative indicated to me what I should say here. They didn't. [289]

H. M. SHREVE, a witness called and sworn on behalf of the plaintiff, testified as follows:

I live at Tulare, Tulare Co., California. My present business is banking in that City. I am Vice-President and Manager of the First National Bank there, and have been since 1902. I am acquainted with the country around the present town of Mc-Kittrick, in Kern Co., California. I first became interested in that country in 1888 or 1889. I was there first taking up land, locating it for mining purposes. I, with associates, located land there. The locations were all in T. 30, R. 22, in Sections 21, 19 and 29. The Southern Pacific Railroad Co., made claim to

those odd-numbered sections which I have described, under the grant of July 27, 1866. They made application for the land at the Visalia Land Office. We had made the locations before the Company made its application, and we protested against the issuance of patents to these lands because of the alleged mineral character. The Tulare Oil & Mining Co., had been organized at that time. I was one of the organizers and stockholders of that Company. The Company was organized for the purpose of holding the lands that had been located in the Buena Vista district, T. 30, R. 22, and the interests which I and my associates held as locators of the land described, had been at that time, previously transferred to that Company. Upon the initiation of the contest or protest against the Company's application for patent, an agreement or understanding was made by us with the Railroad Co., as to the relinquishment of a portion of the land. That must have been in the latter part of 1899. In pursuance of that agreement a part of the land was transferred to the Tulare Oil & Mining Co., by the Southern Pacific Railroad Co., and a relinquishment was made by the Tulare Oil & Mining Co., to the Southern Pacific Railroad Co., of some of the tracts. Referring to Section 21, the local land office at Visalia had [290] rendered a decision as to the character of that land previous to that date. It was favorable to the Southern Pacific Railroad Co., and the Tulare Oil & Mining Co., sought a re-hearing upon that question, and pending that re-hearing, the agreement which I have referred to was entered into.

I was Secretary of the Tulare Oil & Mining Co., at that time. The agreement was in writing. I think when the negotiations were consummated, closed, the agreement was returned to the Southern Pacific Co. Subsequent to that decision the Tulare Oil & Mining Co., made a showing of minerals on Sec. 19, T. 30, R. 22. I believe that showing had an influence upon the Southern Pacific Railroad Co., in effecting this compromise.

I knew Jerome Madden. He was at that time Land Agent for the Southern Pacific Railroad Co. As a result of that agreement a deed was issued-or, rather, no protest was made in the land office; patent was issued, deed was issued by the Southern Pacific Railroad Co., quit claim deed, to the Tulare Oil & Mining Co.; the Tulare Oil & Mining Co., by quit claim deed, deeded to the Southern Pacific Railroad Co., and placed it in escrow, and, after showing of oil was made on the SW1/4 of 19, the deeds passed, the Tulare Oil & Mining Co., taking a deed to the SW1/4 of 19 and the Railroad Co., taking a quit claim deed to the lands in 21. I had a location on section 29. Oil was discovered on that territory by lessees; not by our Company. It would be rather difficult for me to give the date of that discovery. I could refer to the minute record and tell the date. That record is the record of the Secretary of that Company.

Q. "And made by yourself?"

A. "Yes sir; it was, at this time."

Q. "What date was that?"

A. "The matter appears in the minute book

previous to that [291] in Part 1; but it was in 1898."

They made a showing there of a heavy oil, liquid asphaltum oil. The Railroad Co., at the time it was seeking to obtain, through selection, that land, knew by its agents, oil experts or others, of the mineral character of that Section 29. Mr. Treadwell knew about it. He was present up there and saw the oil at the time I was there. It would be difficult to say how much oil was being produced at that time. It was a heavy oil. They didn't have the sand, but I should judge they were getting possibly three or four or five barrels a day. The quit claim deed referred to by me, relating to the fractional SW1/4 of Sec. 19, T. 30, R. 22, was dated Feb. 21, 1900. I recognize the paper now handed to me as that deed.

Thereupon counsel for the plaintiff offered said deed in evidence, which was marked Plaintiff's Exhibit L, a copy of which is as follows:

QUITCLAIM DEED NO. 11980.

THIS DEED, made February 21st, 1900, between the Southern Pacific Railroad Company, a corporation, D. O. Mills and Homer S. King, Trustees under the trust deed hereinafter set forth, the parties of the first part, and Tulare Oil and Mining Company, the party of the second part,

WITNESSETH: That

WHEREAS, on April 1st, 1875, the said Southern Pacific Railroad Company, by trust deed bearing that date, conveyed to D. O. Mills and Lloyd Tevis, the successors and assigns, all lands granted by the United States to aid in the construction of the said Company's railroads, in trust to secure payment of certain bonds particularly set forth in the said trust deed; of which the lands hereinafter described are a part; and

WHEREAS, the said trust deed provided that the said [292] company may sell the lands in it conveyed as opportunity occurred, upon terms agreed upon by the said Company and Trustees; and that when any tract or parcel of said lands shall have been sold and the purchase price fully paid, it shall be conveyed in fee simple by the said Company and Trustees, to the purchaser thereof; and that such conveyance shall release the land so conveyed from all lien or incumbrance of the said trust deed, absolutely and forever; and

WHEREAS, the said trust deed further provided, that in case a vacancy should occur in the number of said Trustees, such vacancy should be filled by the nomination of the remaining Trustee, subject to the approval of the Board of Directors of the said Company; and that the person so nominated and approved, should, immediately upon his acceptance of such appointment, become a Trustee under such trust deed, vested with the same estates, powers, rights and interests, and charged with the same duties and responsibilities, as if he had been one of the original Trustees named in and who executed the said trust deed; and

WHEREAS, on March 24th, 1883, Lloyd Tevis, one of the Trustees aforesaid, resigned his trust un-

der the said trust deed, and on April 3d, 1883, the said D. O. Mills, as remaining Trustee, nominated Gerrit L. Lansing to fill the vacancy created by the resignation of the said Lloyd Tevis; and on April 17th, 1883, the Board of Directors of the said Company approved the nomination of said Gerrit L. Lansing; and on April 18th, 1883, the said Gerrit L. Lansing duly accepted the said appointment; and

WHEREAS, on February 4th, 1896, the said Gerrit L. Lansing died; and on March 14th, 1896, the said D. O. Mills, as remaining Trustee, nominated Homer S. King to fill the vacancy created by the death of the said Gerrit L. Lansing; and on March 18th, 1896, the Board of Directors of the said Company [293] approved the nomination of the said Homer S. King; and on March 21, 1895, the said Homer S. King duly accepted the said appointment; and

WHEREAS, the said trust deed further provided that the Trustees under it shall have the power and authority to act by attorney, to be appointed by them, in making the conveyances in said trust deed provided for; such appointment to be made by letter of attorney, duly acknowledged, and to be recorded in each county within which any of the lands of the said trust deed are situated; and that all deeds made in the names of such Trustees, by their attorney appointed as aforesaid, shall have the same force and effect as if made by the said Trustee in person; and

WHEREAS, on March 28th, 1896, the said D. O. Mills and Homer S. King, Trustees as aforesaid, by letter of attorney duly acknowledged and recorded

as in the said trust deed provided, appointed Jerome Madden their true and lawful attorney, in their names, place and stead to make, execute and deliver all conveyances required of them under and pursuant to the terms of the said trust deed; and

WHEREAS, the said Company has sold the hereinafter described lands upon terms agreed upon by it and the said Trustees to Tulare Oil & Mining Company for the sum of One (\$1.00) Dollar, which sum has been fully paid to the said D. O. Mills and Homer S. King, Trustees as aforesaid;

NOW, THEREFORE, in consideration of the premises, and the said sum of One (\$1.00) Dollar, the receipt whereof is hereby acknowledged, the parties of the first part do remise, release and quitclaim to the said party of the second part, and to its successors and assigns, all the right, title and interest which they now have, or may hereafter acquire, from the Government of the United States, of, in and to the following described [294] tract of land situate, lying and being in the County of Kern and State of California, to-wit:

The fractional South West Quarter (Frac. SW1/4) of Section No. Nineteen (19) in Township Thirty (30) South, of Range Twenty-two (22) East, Mount Diablo Base & Meridian, containing one hundred and sixty-one and one-hundredths acres (161.01), according to the United States surveys, together with all the privileges and appurtenances thereunto appertaining and belonging; reserving all claim of the

United States to said tract as mineral lands. (Internal Revenue Stamp on margin.)

TO HAVE AND TO HOLD the aforesaid premises, to the said party of the second part, its successors and assigns, to its and their use and behoof forever.

IN TESTIMONY WHEREOF, the said Southern Pacific Railroad Company has caused its name to be signed to these presents by its President pro tem and Secretary, and its Corporate Seal to be hereunto affixed; and the said D. O. Mills and Homer S. King, Trustees, by their said attorney, Jerome Madden, have hereunto subscribed their names and affixed their seals the date herein first written.

SOUTHERN PACIFIC RAILROAD COMPANY,

By J. L. Willcutt.

By H. E. Huntington,

Its Secretary. [Corporate Seal].

Its President pro tem.

D. O. Mills, (Seal),

Homer S. King, (Seal),

Trustees.

Br & K. G. T. F.

By Jerome Madden, Their Joint Attorney-in-fact.

State of California,

City and County of San Francisco, -ss.

On this 21st day of February, in the year one thousand nine hundred (1900) before me, E. B. Ryan, a Notary Public in and [295] for the City and County of San Francisco, State of California, personally appeared H. E. Huntington, known to me to be the President pro tem and J. L. Wilcutt, known to me to

be the Secretary, of the Corporation that executed the within instrument; and each of them acknowledged to me that such Corporation executed the same; also, on this the day aforesaid, before me, the Notary Public aforesaid, personally appeared Jerome Madden, known to me to be the person whose name is subscribed to the within instrument, as the Attorney-in-fact of D. O. Mills and Homer S. King, and acknowledged to me that he subscribed the names of the said D. O. Mills and Homer S. King thereto as principals, and his own name as Attorney-in-fact.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at my office in the City and County of San Francisco, State of California, on the day and year above written.

[Notarial Seal].

E. B. RYAN,

Notary Public in and for the City and County of San Francisco, State of California.

[Endorsed]: 3248 Quitclaim Deed No. 11980. Southern Pacific Railroad Co., D. O. Mills and Homer S. King, Trustees. To (Tulare, Cal.) Tulare Oil and Mining Co. Quitclaim Deed. Dated February 21st, 1900. Recorded at Request of H. M. Shreve June 7th, 1901, at 45 min. past 8 A. M. in Book 98 of Deeds, Page 134, Kern County Records. Chas. A. Lee, Recorder, By C. S. Meroney, Deputy Recorder. \$2.00. Compared.

U. S. Dist. Ct. So. Dist. Cal. Northern Div. United States vs. Southern Pacific Co. et al., No. 221.

Plaintiff's Exhibit Shreve No. 1. Filed April 25th, 1912, Leo Longley, Special Examiner. [296]

Witness continuing further, testifies as follows:

I am not a practical mining man or oil expert. I have had some experience in putting some wells down, but I am not an expert. I am acquainted with the oil seepages and showings around the then town of Asphalto, or around what is now known as McKittrick, from personal observation. As a description of their appearance and location, I would say that, in various parts of 30-22, right in the immediate vicinity of Mc-Kittrick, there are large showings of liquid asphaltum oozing from the ground, and in many crevices and in the excavations made, in the summer time the asphaltum is in a liquid shape. In recent years there has been a great many of those pits dug for the purpose of catching the asphaltum, which was used at one time for fluxing, in making asphaltum. They had an asphalto plant there at one time. There were such indications in the early days, when I first went into that field. In many places the asphaltum had shown and evaporated on top, that had been at one time liquid asphaltum, the same as in these gulches. A waste of oil was shown quite considerable in previous The evidences I saw there have much influenced me in making locations. At that time I did not know about, and had not been in the Elk Hills. I have never been in the Elk Hills in my life, that I know of, and know nothing whatever about them.

CROSS EXAMINATION

OF

H. M. SHREVE.

I cannot tell exactly the date when the Tulare Oil

& Mining Co. was formed. It was the following year after the claims were located, in 1899. I used to run out to McKittrick quite frequently up until 1901, then for twelve years I went over there at different times. The property in the SW1/4 of Sec. 19,-30-22 was located, I think, in 1889. I could not give the date of the contest in the land office, concerning Section 19, [297] T. 30, R. 22 without referring to the minute book. I think I can by referring to our mining company's minutes. The minute book shows a resolution authorizing the Board of Directors to proceed in the hearing, I think. After referring to the book the witness said it was prior to 1899. I cannot fix the date. The resolution was passed Nov. 6, 1899, and related to the matter of re-opening the case that had been recently decided adversely to the Tulare Oil & Mining Co. I cannot tell how long before that the protest was filed; I have no recollection except what appears from the book. I don't know whether I had anything personally to do with the filing of the protest or whether the President of the Company did it. I do not, at this time, know what the contents of the protest were. I know, of my own knowledge, that it was filed. I don't think I was present at the contest which was held, I think, in the local land office. I think our Company produced witnesses at that contest. I could not say positively. We were represented by an attorney. After the hearing of that contest a decision was rendered in favor of the Southern Pacific Railroad Co., as to the character of the land. There had been very little development work done

on the SW1/4 of 19 prior to 1909. No oil had been discovered on that quarter prior to that date. We had not discovered oil in Section 21. 19 and 21 were involved in that contest.' I think the south half of 19. On the SW1/4 I think no wells were put down. On the $SE^{1/4}$ of 19 there were wells at that time. I cannot say whether it was the S1/2 of 19 or merely the SW1/4 of 19 that was involved in the contest. After the decision of the land office, our company applied for a re-hearing. No, we didn't apply for a re-hearing; we made arrangements with the Railroad Co. not to re-open the case. In the meantime, we had a well bored on the SW1/4 of 19 and found light oil there. We found heavy oil in Section 29. That was not involved in the contest. We had not dis- [298] covered light oil in 19 between the time of the hearing and the time we decided to apply for a re-hearing. I cannot state the date when the discovery of oil on the SW1/4 of 19 was made. It was made before the execution of the deed. It must have been five months before. Instead of carrying on our application for a re-hearing, we entered into an agreement with the Railroad Co. The Railroad Co., procured its patent to this land and then the deeds were executed. I do not know, as a matter of fact, that Section 19 was not patented until May 22, 1901. I don't know when it was patented.

The SW1/4 of Sec. 19 must be about two miles from McKittrick, southwest from the present town of McKittrick. At one time the town was further south than it is now. I cannot say that this section is situated southwest and south of the Elk Hills. I

am not familiar with where the Elk Hills are. This location of ours was not in the Elk Hills, to my knowledge. I was never over the Elk Hills, and know nothing about them. Section 19, pointed out to me on the map marked "Government's Exhibit I," is sitnated in what is marked on that Exhibit as McKittrick Hills. I don't think I was ever on the sections marked in that Exhibit with red hatch lines in Township 30, R. 23. I would like to say that in the early days, before the Railroad came through, in driving from Bakersfield to McKittrick, it is possible that in going directly west, we went through Elk Hills. don't remember of doing so. We usually followed the line of least resistance and sought to go through a pass. During all the time I was in there I knew nothing about the Elk Hills. We now own some land in Section 28, a little south and east of McKittrick, but don't own any anywhere near the part described as Elk Hills. The land we own would be in the general range running to the Southeast, towards the Sunset field.

I am not familiar with the mountain range called the [299] Temblor Range. I have been through the mountain range lying to the West and Southwest of McKittrick once or twice, just passed through. We were there for the purpose of locating claims. My first venture was in developing new territory. In later years I was not so interested. I was interested in just the original claims we had located in the early days. We maintained a large number of them. Some we didn't. Some we obtained patents for, and disposed

of same. There was no new territory acquired. I took quite a considerable interest in the oil business in that period. I was interested in any new discovery on those claims, in a general way. I did not keep track of the general development of that oil territory except at McKittrick and in that vicinity. I was familiar generally with what was going on at McKittrick. I can't state that I was familiar with what was going on in the territory surrounding McKittrick. In later years, when so much development was going on, I visited McKittrick, but not as much as in the early part. The other territories were opened up after my interest ceased, to a large extent. My interest ceased, I think, in 1900 or 1901. I was at McKittrick a great deal then, but after that I only went out a few times. I know nothing whatever about the Elk Hills and heard nothing about them. [2991/2]

REDIRECT EXAMINATION OF H. M. SHREVE.

By Mr. Mills:

- Q. Those hills east of the McKittrick in those days were not known as the Elk Hills?
 - A. I think not. That is a new name to me.
- Q. By Mr. Lewers—You didn't hear anything about that country out there by any name, did you, while you were in there?
 - A. No sir.

Mr. Lewers.

Before you call the next witness, I desire the record to show that after the witness Jacob Kaerth yesterday on the stand announced that he was willing to immediately go out into the Elk Hills with a representative of the defendants in this case, and after he left the stand we endeavored to make arrangements with him to go out there and point out the places where he found the ledge of asphaltum, or reefs, and oil seeps in Township 30-23, he having testified that the asphaltum reefs, as he called them, existed in numerous places in that township. That after leaving the stand, in response to our request to go out there and show our representative, he stated at first the was willing to do so.

Mr. Mills—I want to interpose an objection to this gossip and tittle-tattle. If counsel wants to be on the stand and sworn and give us an opportunity to cross-examine him, we are perfectly willing that he make any statement he wants to. But this idea of testifying into the record from the mere statements of counsel, we shall object to as improper and entirely hearsay.

Mr. Lewers—I understand the reason for the objection. After stating first that he was willing to go, he later informed us after conference with the attorneys for the Government that [300] he declined to go.

Mr. McCormick—We want to put in a further objection and ask that it be considered as made at the time Mr. Mills made the objection that Mr. Kaerth is a witness and testified where he lived, and the process of the court is open to the defendant to subpoena him.

Mr. Lewers—All I know is he was willing to go at first and changed his mind for some reason. [301]

H. P. DOVER, a witness called and sworn on behalf of the plaintiff, testified as follows:

I live at San Pablo, or Richmond. I am 47 years old. I know what is known as the Elk Hills, in Kern County. I have been over those hills, the first time in 1903 or '04, sometime in the spring. There were five of us in the party; my brother, my father and Jack Anderson. I don't recollect the other. We went over to locate oil lands and located several claims. It is hard to say how many. I do not know that any of our Sections were in T. 30-23. We located two sections, I think, 25 and 26. (Witness indicated the township by pointing to the map, but did not tesrify as to the range and township.) In T. 30-24, there was a kind of blow out in a large gulch that went down through the country, which showed indications of oil on both sides, near the bottom of the gulch-of discolored clay and some sand. It showed a stain of oil, in my opinion. We detected it a little with ether. There was a smell in the rock, or in this clay or sand, but I couldn't pronounce it gas. It was more of a sulphur. I could not tell the extent of that showing in the gulch, it was a couple of hundred yards up the canon. We went up the canon on it.

I know where Buena Vista Lake is at the end of Elk Hills. The stained sand was in the Elk Hills. It was on Sec. 11, about six or eight miles West of the Lake. We had some locations that would be a mile North and East of that seepage or oil stain most of them on the slope.

I was in the oil business in the Midway a while. I am in the oil business today. I started in the oil business in 1901. While in that business I had occasion to notice the formation of the land through which we drilled. We did not find quite as much shale in the Elk Hills as in the Midway Field, but the formation, I think, was favorable for oil property. I have [302] not had any reason to change my opinion since that date.

The Elk Hills have no value for crop raising or agricultural pursuits that I have ever known of. For farming it was no good. It was rough and dry. Nothing seemed to grow there. In the spring of the year of a wet spring, there might be a little feed for a month or so. The chief value of the Elk Hills is for oil, if for anything.

I know a little group of hills, of more depressed elevation, South of the Elk Hills, called the Buena Vista Hills, on the map before me, which run in a northeasterly and south-westerly direction towards the lake. I have been there. In Sec. 11, T. 32, R. 24, there is a blow out. I judge it to be two or three hundred yards long where it crops out. I saw it in 1910. I made one location on one quarter section. The discovery of the gas blow out in the Buena Vista Hills influenced me in making that location. I am interested in one other Section in the Elk Hills; Section 30, I think, T. 30, R. 24. I think it is near the blow out.

CROSS EXAMINATION OF H. P. DOVER.

I first went into the Elk Hills in 1903 or '04, for the purpose of locating oil lands. I had been in the Hills before. I can't tell when. I worked stock there for Miller & Lux for years. I had been there on numerous occasions before I went in and located these claims. I first became interested in oil locations in 1901, in the Midway, on Sec. 25-32-23. At that time I began active prospecting for oil. We began to put down some wells on leased lands on Section 25, in the Midway. I had no other experience except in the Midway before I went into the Elk Hills and located in 1903. We went into the Elk Hills with a team and camped. We went in from what is Cole's Ridge, south and east of the hills. Didn't go in from Miller & Lux's headquarters at that time. [303] We came to a blow out which showed on both sides of the gully, or canon. I couldn't be positive as to what section that was in. I would say it was about Section I can't tell whether the ground where the blow out was had been located before I went in there in 1903 with my father and brother to make locations, but there was ground all through there that was located at that time. I don't know as a fact how many locations we made on that occasion, but I think three or four sections. I judge it was sometime in May, or maybe later in 1903, when we made those locations. I don't recollect that we made a claim there known as the Crow No. 6. I couldn't be sure

we located a claim in Section 25, Township 30, Range 23, in 1903, I think it was the year after we located in there. I cannot fix the month we went in in 1903, it might have been as early as March, but I would take it to be later; along in May. It was not the first of January; not that first time we were in there. I did locate some land the next year, in January. My brother and cousin had been in there before we made those locations, a cousin of the same name, they were there before I was there. I can't say what time they were there. My cousin's initials were H. J. I knew J. L. Strowbridge. He was associated with my brother in lots of locations there. I knew E. J. Emmons. Charles Duval and J. A. Banfield. I think Emmons was in on some of our locations. Banfield and Duval were put on some other locations besides mine, if they were put on. They were not in there with me at the time we made locations in the Spring of 1903. I don't know whether they were in there before that or after. Strowbridge lived on what is termed, the Island, in Kern Co., and Banfield lived in Bakersfield. I shouldn't call my father a practical oil man. He has been in the oil business a great deal. I won't swear whether I made a location on January 1, 1903. I have no records. [304] I was in there in January one year, but my recollection is the first time I went in there was in May, 1903. My recollection is that I located all of Section 25, but I think Mr. Barlow and Hall and Tom O'Brien and a fellow named Schofield located that when it was located, 25 and 26. We did not do much of anything with the claims located, in 1903, only in Section 30, that we now hold under the oil locations. I think we located three or four, or maybe more. I didn't do anyhing in 1903 except locate and record them. I believe we relocated some of this same ground in January, 1904. I could not say how much. I was not with them at that time. We did nothing with it in 1904.

In the Spring of 1904, I lived in Bakersfield. The Californian, and, I think, the Echo newspapers were published there at that time. I read them both at times. I think I subscribed for the Californian, and saw the other from time to time. I was familiar with both of these papers more or less, in a general way. I don't think I was in Bakersfield during the summer and fall of 1904. I was in San Francisco for about six months, in bed, sick. I think I went into the Hospital the first day of May and came out in August. I didn't return to Bakersfield for two or three months after I came out. I stayed at Richmond. I didn't see many of the Bakersfield papers during that time. Cannot recall to my recollection whether I ever saw them.

I don't think that either I or my associates did anything at all with these claims in the way of development during 1904. If they were re-located on Jan. 1, 1905, I was not in on the locations. They might have been re-located. I, together with W. H. Hill, Tim Sullivan, T. N. Schofield and Thomas W. Brun, located the SW1/4 of Section 25, T. 30, R. 23, but I cannot state the time. I located, I think, Sections 25 and

26, at that time, and that was all I ever located in that township. I don't know as I ever re-located them or had anything to do with them. I don't [305] know whether I drew out altogether. I didn't pay any attention to any more locations in there. I located in 24 in the Elk Hills I cannot state when. My cousin went there and located two or three sections, Section 30 amongst them, in T. 30, R. 24. That was a year or so later. They leased Section 30 to the Associated I believe, and they are working on it now. did not do any work on any of these locations during the year 1905, more than to survey them and mark them out and locate them. No development work was done that year or in 1906 or 1907 that I know of. It seems to me that the land was leased to the Associated in 1908. Neither I nor my associates did any development work in 1908 that I know of. In 1909 they had some men on the ground. I sent money from Frisco to pay the wages of the men to dig gypsum or something; but I never saw the work done, and have not seen that country since. From 1903 to 1909 nothing whatever was done in the way of development work on those claims by me or my associates. I made no discovery of oil in 1903, or after that. They claim that they have got an o'd well on Section 30 now. In 1903 or 1904, I did not know of any oil in the Elk Hills. I never saw any oil there, or other mineral; nothing but this blow out, and we located the territory because of it.

Mr. Schofield was connected with oil properties in the Kern River fields and at McKittrick. He was a man of means. Mr. Sullivan and Mr. O'Brien had means. I guess they could have put money into the development of the property if they so desired. Neither I nor my father had any means. If the Elk Hills were not valuable for oil they would not be valuable for anything, in my opinion.

REDIRECT EXAMINATION OF H. P. DOVER.

There were four wells put down on Section 25, 32-23. One by the Sunset Co., New Richmond, Occidental Queen and Barton. [306] There was a little seepage of oil in Section 23-32-23. I saw it the first time in 1901. A man named Van Meter saw it the first time. It was not like the seepage in 32, in the Elk Hills. There was oil in 32 oozing out of the ground. Some of the old locations we had there were abandoned because of the slump in the oil business in Kern Co., and oil was a kind of drug on the market for two or three years. Nobody would put any money in oil property. I have had some extensive experience in the oil business in the Midway. We claimed that during the time of the slump referred to there was not much profit, even on developed property, in handling oil. Oil was selling very cheap, even in the Kern River fields. Tim Sullivan, Tom O'Brien and Schofield were interested in oil properties besides the locations we made with them in the Elk Hills. I heard Mr. Schofield say there was nothing in the oil business at that time, and he didn' feel like putting money into it.

RE-CROSS EXAMINATION OF H. P. DOVER.

I don't know whether Schofield said there was probably nothing in the Elk Hills. That was never mentioned, whether there was oil in the Elk Hills or not, as a reason for not developing the claims. It looked to be pretty good territory, and looked promising to all of them. We believed, and thought oil was there, the same as we did in the Midway when we went in there first. We were taking a chance.

We didn't want to put money on the chance when oil was down that cheap. It continued down that cheap for four or five years. I held the ground after oil went up, but not with those people I was first in with. We have a well on Section 30. I didn't put it on. I leased it to people that did put it on. was over in the next township. I didn't do anything in T. 30, 23. I was in three or four companies from 1903 up to 1906. [307] Was pretty heavily interested. Sec. 25-32-23. During that time I did development work on Section 25 and got patent, notwithstanding the depression of the price of oil. I started to work on Section 25 in 1901, just as the slump was going down. We started putting the wells down and went through and finished them. I think that was about all the development work done by the Companies I was interested in. We kept on the work on that Section and got a patent because we believed there was oil there, and knew it after we got it.

COLON F. WHITTIER, a witness called and sworn on behalf of the plaintiff, testified as follows:

My business is producing oil. I am operating in Midway, McKittrick, Oklahoma, Maricopa, on the West Side and in various places. I have had oil holdings near Coalinga. I have four producing wells in McKittrick; nine in Section 6-32-23; two in Sec. 24-31-22. I have others that are not producing. I cannot tell exactly what the total output of my producing wells was during last year, without looking at our books, but it was somewhere near a million barrels. I have been in the oil business a little over fourteen years. I first went to McKittrick in the summer of 1902.

I know what is known as the Elk Hills. They trend Northwest and Southeast. I know where the railroad gap is that comes down through the hills into McKittrick. I cannot say positively that the railroad crosses Section 14. There is indication of an anticline in the Elk Hills. I first saw it in 1902, from the railroad. There is some asphaltum showing in that gap, some oil sands—dry oil. The anticline is sufficiently marked to be seen from the train as it goes through. That anticline runs back through the Elk Hills, towards the Southeast. I know this because the apex of the hills show it. [308]

I have examined the shales, or sands, around Mc-Kittrick. The shales are practically the same as the shales in the Elk Hills. As to the sand in the Elk Hills, I cannot say that they are like the sand around McKittrick, because I have never seen the sand in the Elk Hills except where the railroad crosses. I have made personal examination of the anticline

where the railroad passes through the Elk Hills. I know generally the formation of the land from Mc-Kittrick down towards Sunset. I suppose I have been in McKittrick from 100 to 200 times in the last fourteen years, perhaps more. I know of oil seepages, or oil outcroppings, or sand, on the East fiank of the Temblor range, between Sunset and Mc-Kittrick. There are quite a number of them back there—there is a large cropping in Section 14-31-21, one in 24-31-21, one in 19-31-22, one in 2-32-22, one in 1-32-22, one in 6-32-23 and several others between that section and Maricopa, but I cannot give the numbers of the sections. I know of asphaltum showings in 30-22, around McKittrick. I have examined it myself. There are some of these outcroppings which are directly back or south of the town of McKittrick, in the fault running from the northwest to the southeast and extending to the southeast, cropping very prominently in sections 34 and 35, in 30-22. I don't know positively of any oil seeps in the Elk Hills. In 31-24 I do. That is in what is called the Buena Vista Hills. I have been in the Buena Vista Hills myself. I found natural indications of oil there. It was a cropping commonly called a blow out, caused evidently by oil coming up through a crevice in the formation. The sand is not showing there. The oil evidently came up through a crevice in the shale-had come to the surface and dried out. It was showing quite prominently and I set it on fire and it burned for some two weeks. I consider the shales and sands on the Buena Vista Hills about the same as those on the flank of the Temblor range and on the Elk Hills, as [309] far as I have examined them.

In riding to Buena Vista from Bakersfield, I have passed by the eastern end of the Elk Hills. I noticed an anticline running in a northeasterly direction, in 1902. I believe the Elk Hills have value for mineral; for oil. I discovered the seepages I have mentioned along in 1903.

CROSS EXAMINATION OF COLON F. WHITTIER.

I have been actively engaged in the oil business for fourteen years. I have had considerable experience in sinking wells.

I am quite familiar with the country surrounding McKittrick, and have been since 1902. I owned properties only at McKittrick in 1902, in Section 18-30-22. I prospected for oil myself during that period. I examined the country quite considerably. made any locations. Prospected to see whether I wanted any locations or not. I intended to make financial arrangements before I did any locating, if I found desirable property I would make arrangements to locate, if nothing else came up to attract my attention otherwise. I am interested in the oil business from a producing standpoint and not from a speculating standpoint. I made no locations in the Elk Hills. I partly made arrangements to do so in T. 30-24, throughout the township. I had talked with some personal friends of mine as to the situation and intended to go in there and make some locations and do development work and get a patent to the land, but I was unfortunately crippled so that I couldn't go over there then.

I went into the Buena Vista Hills to examine properties for other people in 1902, but not into the Elk Hills. I was in the Elk Hills some four or five times prior to 1905. During these trips I found traces of the anticline I have men-[310] tioned. Both slopes of the anticline were revealed in the stratification. The northeast slope is the flatter of the two; it don't dip as steep as the southwest. I didn't find as strong or as frequent indications along the slope towards the southwest as I did on the northeast. The anticline does not slope to the southwest in the southwest portion of the Elk Hills. It does in the northwestern portion, near where the railroad passes through. Where the railroad passes through, I found indications of the southwest flank of the anticline. In the southeast portion it seems to have broken, and the formation on the southwest portion has slipped under. I considered it a true anti-cline. I made sufficient examination to satisfy myself on that point. On the west end I found both flanks revealed. Found no indications of slipping at the west end. I don't think it could have been an overturned syncline. In my judgment it was not. I concluded that the depth at which oil would be found was from 2500 to 3000 feet, and made a report in 1902 to some people in the east, who were operating on the northeastern slope of the Buena Vista Hills.

I don't think there was, in 1902, a general idea amongst practical oil producers that there was any limit as to the depth to which oil could be economically worked.

There was a general impression among oil men that oil could be produced from the depth of 5000 feet, but they were not equipped to go after it to that depth. They were equipped to go after it some 2000 or 2500 feet. 2000 feet at that time was considered as hard territory as 3000 feet today, or, perhaps 3500 feet. Appliances and methods have been improved so that it is now practical to economically sink to a much greater depth than could have been done in 1903 and 1904. I don't want any 4000 feet wells today. Too expensive.

A 200 barrel well drilled to a depth of 4000 feet, in [311] the Elk Hills, could be made to pay, of course, that would depend on the life of the well. The average life of a well in that vicinity would be from ten to fifteen years. There are wells that last longer than ten years, in the vicinity of McKittrick. They don't continue at a uniform production. They gradually go down. There are wells producing in McKittrick today that have been producing considerable over ten years. The average life of a well depends on the particular territory, whether it is a territory that is going to be troubled by water and the oil driven away or whether it is not. Frequently a well strikes a bed of oil sand that is not very large, or more or less dry. That affects the age of a well. Under ordinary con-

ditions, I think a well of 4000 feet ought to produce more than 200 barrels a day to make it profitable. It would depend on the gravity of the oil. It wouldn't pay to drill a 4000 foot well for 45 barrels per day. I wouldn't advise a person to drill that kind of a well. I think it to be a foolish venture in such formations as we have here in California.

REDIRECT EXAMINATION OF COLON F. WHITTIER.

It was the general impression of the oil men of my acquaintance around McKittrick, as early as 1904, that the Elk Hills would become oil bearing-would be proven to be oil bearing. Whether or not they could be made to pay, would be a matter of development. There were a lot of locations there at that time, but I didn't know of any drilling being done there then. At that time the law didn't require our going ahead and drilling. I regarded the oil character of the Elk Hills strong enough to warrant the expenditure of money in an attempt to prove its possibilities as early as 1904; I regarded it as being a good prospective oil field, and I was making arrangements at that time to get money together to locate some land and do the assess- [312] ment work which the law required at that time, and get our patent to the land and then await future development. An injury to my knee kept me confined to the house several years and that prevented me from doing that.

The life of a well naturally depends upon the thickness of the oil sands through which it is drilled. A

well with perforations in the casing 800 feet through oil sand would be longer lived than one of 40 feet.

I am acquainted with the life of wells in Kern River. The oldest well that I know out there is thirteen years.

From my observation I would say that the chief value of the Elk Hills is for oil, if for anything.

RE-CROSS EXAMINATION OF COLON F. WHITTIER.

The Elk Hills has not much value for grazing. There is nothing there to keep stock there long. They could not live while they were going across. There has been some sheep around through the country there. I don't know of any use that has been made of it. Never had my attention particularly directed to that. I was looking for oil. I didn't find any in T. 30-23. I regarded that as possible prospective oil territory. I thought oil might be found there; I considered that it justified going ahead and making locations and doing the assessment work and getting patents to the land. After a person had gotten a patent to the land, he could afford, with a lot of them chipping in together, to put in a test well. At that time we were just a little bit at sea as to whether or not a person could hold claims under locations and do development work, and if a person went in and made a discovery by drilling and found oil, they would have all kinds of contests over the title. would be to do our assessment work and get our patent to the ground before we made any attempts to

drill for oil. All the time I had in mind the possibility that [313] we would find oil. We might have to go so deep as to give it up and not get it at all. I thought it was territory that at some time or other a chance might be taken on, and that was as far as I was willing to go.

REDIRECT EXAMINATION OF COLON F. WHITTIER.

From my observation of 30-24 and 30-23 and the Elk Hills generally, the conditions were such in 1904, or up to that time, to justify an ordinarily prudent man in the expenditure of money with the reasonable expectation of developing a paying oil property; so that I would advise at that time people with capital, who could afford to take the chance, to drill there to make a test. I wouldn't advise any person of small means, or even a person of large means, to make a test on a small piece of ground. That is why I advised the people who were operating on the northeast slope of the Buena Vista Hills to abandon their work. I have had no reason to change my opinion as to the oil value of those lands.

RE-CROSS EXAMINATION OF COLON F. WHITTIER.

It is not so much of a gamble now, because it has been proved that it is oil bearing at a great depth, but prior to 1904 I looked on it as a gamble. I would have had that opinion independent of the fact that oil had been discovered over to the West. Knowing the

oil formation of those fields as well as the Midway Fields—it is an oil formation. The gamble was not whether or not there was oil there, but whether it was there in paying quantities. All prospective oil land is not paying oil land and one cannot determine that without actually drilling wells.

REDIRECT EXAMINATION OF COLON F. WHITTIER. [314]

The Elk Hills was no more a gamble than other oil ventures I was in or started. It was more of a gamble than it would be at those places closer to the croppings. Assuming that there is a cropping in Section 32, of 30-24, I would say that there was no more of a gamble in drilling in lands within two or three miles of that, or in that vicinity, than there was in other lands, not if it was a prominent cropping and showed distinctly the oil coming to the surface. In locating wells I have been influenced by oil seepages in the neighborhood. This was the case with reference to oil seepages in the flank of the Temblor range. I have found dry holes in drilling oil wells. I have found oil where I located wells with reference to seeps in the Temblor Range. I would consider an oil location five or six miles West of that oil seep I found in the east end of the Elk Hills much more of a gamble than one on the cropping on the Buena Vista Hills or the McKittrick Hills, although the outcroppings at McKittrick are very treacherous because the formation is bad, so bad that you can get a well, and 100 feet from that, not anything. Our Shamrock

well was drilled within 100 feet of a well drilled by the original owners, who abandoned the property and considered it no good, and our No. 3 flowed 1700 barrels a day for three years, only 100 feet away. It is because the formation is broken, tipping up edgeways, and faults will frequently prevent oil measures being discovered a short distance from the well. There are no indications of faults of that character in the Elk Hills, it is very much more even. I judge this from the surface. In McKittrick, it is on the surface, it is broken and shows the formation standing straight up and down. In the Elk Hills the formation is not broken so badly, and if the oil was originally there, it is there yet, but in McKittrick that is not so. [315]

FRANK BARRETT, a witness called and sworn on behalf of the plaintiff, testified as follows:

I am 67 years old. My present address is Redondo Beach. I have had experience in the oil business practically all my life, in Pennsylvania, West Virginia, Kentucky, Ohio, Texas, California and Indiana.

In California, I first went into the Coalinga field in the Spring of 1895. Was first in the oil business in 1862, as a boy, and since that time have been generally engaged in that business. I brought in the first paying well in the Coalinga field and shipped the first oil that was shipped out of there. I was interested in what was called the Producers and Consumers Oil Co., in Sec. 20-19-15, then the Home Oil Company. They operated in Coalinga. Then I

formed two or three other companies there, but have forgotten the names of them. I was President of two companies that were subsidiary to the Union Oil Co., for two years.

I know where the Elk Hills are situated, in Kern County. I have visited them. I first went there in 1899. I went there in the interest of a gentleman named Hilbish. As near as I can recall now, there was a firm in San Francisco, Baker & Hamilton, either had acquired or were to acquire lands down there, and Hilbish had some connection there and he wanted to go into the oil business and wanted to form a company, and he paid me \$100.00 a day and my expenses to go down there. In pursuance of that contract, I went down there in 1899. I rode over the entire township diagonally. I came from Mc-Kittrick by rig at that time. I think they then called it Asphaltum. I went through the Elk Hills and came back to the south of the hills, beginning at the East end of the hills, through what is now called Elk Horn Valley, to McKittrick. The general direction of the Elk Hills was Northwest and Southeast. I found [316] those oil indications. I found two or three places where there had been seepages, and, of course, you could see twice as big as your hand on the side of the formation, where, perhaps all of the lighter properties had evaporated and you could see it there and scrape it off with your knife. It was not asphaltum; it was oil. Then I took some of the outcroppings home with me, and, from the smell you could just

get a little odor of oil, but when I crushed it at home and applied the chloroform test to it, I got traces of oil out of it. I wouldn't be positive that it was in Section 17, but I think it was, where I found the seepage. One of Miller & Lux's men was with me to pilot me. He told me, I think, it was in 17. It was in T. 30-24, near section 23. From my examination, I believe these lands to be good oil bearing territory.

I knew of asphaltum outcroppings around McKittrick, the oil springs over there, previous to that time. In a measure, my opinion was made up partly from the oil croppings there and the seepages in the McKittrick region, more positively so from the formations I had gone through in the Coalinga field.

I noticed very pronounced indications of anticlines in the Elk Hills. I know where the railroad passes through the gap there. I don't know the sections it is in. I noticed a pronounced anticline there. It was at the Northwest end of the Elk Hills. I think the trend of the anticline was to the Southwest. At the Northwest end of the Hills I would say they would go southeast. I don't think the characteristics of the formation of the Elk Hills are at all dissimilar to the formation around McKittrick, and not dissimilar to that at Taft and Maricopa.

Oil lands in the different fields that I have operated in California are worth about \$300.00 to \$3,500.00 per acre. I have dealt in oil lands in California myself. Pretty hard [317] question to say what Sections 15, 17, 19, 21, 23, 25, 27, 29, 33 and 35, in T. 30-23, in the Elk Hills, were worth. Without any producing wells on them at all, their value would not be measured as high as if there had been producing wells on them, but they ought to have been reasonably worth \$200.00 to \$300.00 an acre as oil lands. That is what I believe them to be.

As to their value aside from the oil value, I don't think you could raise a black-eyed pea on them. I wouldn't have them to pay taxes on them for agriculture. I don't think they have any value at all for agricultural purposes—for raising crops. As to their value for grazing, I suppose when the winter rains occur, the filaree would grow up there, but it would not last very long, probably not over six weeks or two months, in a very good season.

As to the topography of those lands, the lands immediately adjoining the Elk Hills, in some places it is a little broken. In others the formation seems to be uniform. I think a New England farmer might have made something out of them, but not a California farmer. The absence of water would be a deterioration of the value of the land—it was the California desert climate.

I made a report on the land, and a favorable one in writing. I recommended the lands as good oil bearing territory, and have had no reason since that to change my opinion.

CROSS EXAMINATION OF FRANK BARRETT.

I gave the report I made to Mr. Hilbish and kept

482

a copy, which I afterwards sent to him. I was in Mc-Kittrick three days at that time and was then on the territory both East and West. I spent only two days in the Elk Hills and then I went to the other, and I saw what I thought satisfied me and I spent an extra day that I didn't charge for to see the other portion. [318] I didn't recommend any particular portion of the Elk Hills. He just asked me to go over T. 30-23 and see if it would be good oil bearing territory. That was the section to which my attention was particularly directed. I think the seepage was found in Section 17. I cannot be positive about that. The man from Miller & Lux's ranch told me it was 17, and, as near as I could measure by my riding, I believe it was. The oil seep was in a gully. I saw it only on one side, down near the bottom of the gully. There was no cabin in sight of the oil seep. It was not in Section 32-30-24. If I was in T. 24 at all, I was simply on the edge of it. I believe it was six or seven miles from Miller & Lux's headquarters. I can't reeall how far it was from the ranch. It might have been four miles. I cannot recollect the exact distance. If my memory serves me, it was a little North and West from the ranch. I think we found two or three section corners, not marked. I think one corner was very close to this oil seep. As to whether the territory where I found the oil seep had been surveyed and marked out, I will say that there were section corners there on the North half of that Section. I don't recall whether I saw any on the South Half or

not but I think not. I mean the North Half of the Township. I think there were corners on the North Half of Section 17. I can't be positive of that. I was on the North Half of T. 30-23 and found some section corners there: some on the hills and some on the flat. I had my field glasses with me and we would ride along and this man with me would say we have ridden two or three miles and he would point out "there is a section corner" and we might have passed one. I don't believe I can tell whether he pointed out any section corners after we left the North line. I never expected to hear anything again about it and never charged my memory with it at all. I think we saw section corners before he told me we were in Section 17. I located this [319] section and this man told me that we were on it. By riding along I could measure the distance and could tell-by the horse walking and could tell—that we had gone a mile from the last section corner, which was marked. saw the corners. I don't know who put them there, whether it was the Government or somebody else. I found some three or four seepages where oil had seeped out and caked. All of the lighter properties, of course, had evaporated. I couldn't tell how many were there, but there were three or four. There was one blow out that I saw that was a live seepage with actual oil coming out of it. It was not in the Buena Vista Hills or the McKittrick Hills. It was in the Elk Hills. To the best of my recollection it was in Section 17. I couldn't answer how far from that

indication we saw in Section 17 it was to the nearest other indication. It is hardly possible that these oil seeps that I refer to were in an entirely different township, because I was not in a different township at that time. I was on the edge of 30-24, but I was not in the township.

I observed a very prominent anticline. It was most prominent on the apex of the ridge. I could see both sides of it. I had a very powerful pair of field glasses and could stop my horse and look over the country. The anticline did not, in my opinion, correspond entirely with the apex of the hill. I saw stratification revealed there showing the slopes of the anticline. They dipped Northeast and Southwest. I couldn't tell now at what portion of the Elk Hills I found any dip or stratification to the Southwest. I am certain I saw such a dip, but don't recollect where it was.

In my report I didn't recommend the locations of ground in any specific portion of the Elk Hills. The gentleman who sent me there, told me he wanted me to ride through that township and make a report. I don't know where his lands [320] were or where he was going to get them. That was before there was an excitement at all at Bakersfield. There was a well drilling there on the Kern River. I recommended the entire South Half of the township as good oil bearing territory. Well in fact, I recommended all—odd and even numbered sections, one as well as the other. I don't know whether he ever made any locations. I

know that he formed a company. At the time I was in there, I didn't know of any oil deposit underneath any portion of the Elk Hills. I only knew from surface indications and I believed they were there, but I didn't know they were there. I believed the country might produce oil, and I was examining it with reference to its character as an oil prospect. I knew of no discovery of oil in the township and heard of none. I could not have said "this is known oil territory." I could only have said that, in my opinion, it would prove to be such. My experience extends back pretty nearly to the time the first oil well was sunk in this country. I have seen promising oil territory develop-not oil-but I have seen them throw out what was pretty near as good as oil-gas-plenty of it, that was utilized for manufacturing purposes. I have observed promising indications very frequently that didn't pan out. The oil business is a good deallike elections. I don't think the percentage of failures in the oil business is greater than 50% if it is gone into intelligently and systematically, but, still, at the same time, you can't-well, I will illustrate to you. In one section a well down 3200 feet and no oil; the next section to it, 250 feet, and good producer. A high priced expert couldn't see a bit deeper into the ground than another. The oil doesn't always appear where they say it will. The true expert is the drill. You couldn't say that a territory is known oil ground till you put a drill in it. It is not known till it is proven. I have had experience, on the side,

of lode mining, [321] or placer or gold mining, to my sorrow. I found it a good deal more uncertain than the oil business. I knew more about the oil business. I am not of the opinion that a practical oil driller has just as much chance to tell where oil is as a scientific geologist, because a good practical driller may not know exactly where to locate his well, while a man who understands the formations and the topography of the country, and all that, will locate the well and then he turns it over to the driller. Of course, there are many drillers that are theoretical, as well as practical men, but if you take the average of them I am not certain. I have known numerous instances where scientific men have pointed out where wells should be sunk and those wells have been sunk and nothing producd. That is not at all uncommon.

REDIRECT EXAMINATION OF FRANK BARRET.

I am acquainted with the formation around Asphalto. It is somewhat broken. It is the experience of oil men, where lands have been faulted in an oil formation, that they may find a well on one side of a section line and on the other side no producer whatever. This would be due, in a measure, to the fault in the formation. You take the Coalinga field on the North Half of Section 20, the Producers Oil Co., have operated on the NW¼ and the Home Oil Co., was on the NE¼. The Home Oil Co., had an 800 barrel well. On the South Half a half dozen wells drilled

and no oil. But immediately on the South of the Section, of Section 20, they found oil. It might have been due to a fault in the formation, and it might have been due to a dyke and intrusion. I noticed no indication in the Elk Hills of any faulting or dyke. It was pretty generally uniform. There were some little breaks. The chances are 10 to 1 that there is more chance to find a presence of oil sands where [322] the formation is regular.

As a general rule, I find those geologists conservative, except some that are on the speculative order. I don't think one man could see deeper into the ground than another. Of course, he has to base his calculation on the angle of the dip. I am no geologist. Any experience a man would have in the Eastern fields would not benefit him in this field, because there is as much difference between the formations as there is in the character of the oil. You will find a paraffine base there and the asphalt base here.

RE-CROSS EXAMINATION OF FRANK BARRET.

I believe the formation I saw on the surface of the Elk Hills to be a formation that produces oil. I believe the topography of the country—the outcropping, and the shale—it is the formation in which oil comes. I believed oil was there. Of course, the oil would come from a formation entirely different underneath the overlaying surface formation of the Elk Hills. I was not able to determine from my examination of the surface of the Elk Hills, in what position the underlying formations were. It would be pretty hard for anybody to do that. I could not, in the least, tell whether they were faulted or not. Could only judge as to that.

REDIRECT EXAMINATION OF FRANK BARRET.

From the conditions I saw on the surface, I believed the formations to be generally uniform, but a formation is liable to buckle and go right up. [323]

M. T. HUBBARD, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am 64 years old. My present occupation is that of Civil Engineer and Surveyor. I first entered into the business, packing a rod and a bucket of grub, in the Winter of 1864 and '65 in surveying parties on the Central Pacific Railroad. Since that time I have been in the surveying business more than in any other.

I have had experience in surveying lands in California. I have surveyed agricultural lands, oil lands, railroad lands—railroad lines, rather—irrigation ditches. I have surveyed oil lands in Kern County. In the Devils Den Country, the Temblor District, the Belridge District, the McKittrick District, the Elk Hills, Midway, Sunset and Kern.

I have never made a study of oil formations as a business, but it is natural for me to observe indications of oil in an oil bearing territory, and of lead in a lead bearing territory, and silver or gold in their respective territories. I never examined the Elk Hills particularly as to their formation. I made a survey of the Elk Hills in 1901. Surveyed nearly all of T. 30-23. The South Half of that township lies in the Elk Hills; practically all except the North tier of sections. I was surveying for private parties. A man named Sidert engaged me to make the survey. Previous to that time I had done work for the Surveyor General of California. My contract with Mr. Sidert did not come through the Surveyor General's office.

I surveyed the lines of the location of placer oil claims there. I made a memorandum map of the locations at the time. I have the map with me, which I now produce. This is the map of my work. The locator's name is on each quarter section; and this memorandum is some that I didn't have the names of the [324] locators. I had given them previously to Mr. Sidert. Didn't have them at the time I made this map, and I made a memorandum in pencil so he could fill it in, but I see he never did so. I merely ran the lines and found the corners of each quarter section.

Thereupon the map thus referred to was offered in evidence on behalf of the Government, and marked "Plaintiff's Exhibit M."

The witness continuing, testified as follows:

While making the survey, I noticed that the land was very much broken. I didn't consider that it had any value whatever for agriculture. It was too steep, rocky and rough. That is, it had boulders in it. I don't think a person could find, in the whole town-

ship, 160 acres of land that he could plow. I refer to the part of the township that I was over and made the locations on. My survey was in that part of the township which was in the hills. I found no water there and very scant vegetation. Filaree, a kind of grass that grows around the hills there, and foxtail, is the principal grass that comes up. I saw no brush there to amount to anything. A few little bushes. I know of asphaltum deposits, or oil seepages, in 30-22, near McKittrick, in the township to the West of the township I surveyed. I never measured them to get their yardage, but they are very extensive. I have noticed other evidences of oil or asphaltum on the eastern flank of the Temblor Range, in a westerly direction from McKittrick. At that time there were oil wells around McKittrick. There were no oil wells at that time along the eastern flank of that formation, from McKittrick in a southwesterly direction towards Sunset. They had just commenced boring for oil in the Sunset District. I didn't see any oil wells North of McKittrick very far. They were in the immediate vicinity of McKittrick. [325]

I noticed evidences of an anticline from McKittrick North, clear up to the Temblor District, there are evidences of an anticline all the way into the hills. That anticline, I should judge, would strike into the Buena Vista Hills. Since then there has been an anticline found to the East of McKittrick that would strike through the Elk Hills.

I noticed, at the time I was at McKittrick, a gap

in Section 14-30-22, where the railroad goes through. I saw that in driving over it. There is evidence of a pronounced anticline running over the Elk Hills. The reason I say it is pronounced, in driving over it, parties that I was with called my attention to it at the time, and I didn't get out to examine it. I never examined it for the purpose of finding out which way the apex of that anticline, or its axis, trended. I didn't visit the Buena Vista Hills at that time.

In the manner that I came in there, and what I saw from the road, and that afternoon I went up into the oil wells from McKittrick, and I thought they went across into the Elk Hills, but it was just an opinion from looking along the croppings of the anticline. I formed only a superficial opinion as to the oil bearing nature of the country there. I thought there was a very good probability of the lands in 30-23, which I surveyed, proving to be oil land. I have not changed that opinion. I have been more confirmed in my opinion now, from observations that I have seen in that district and others to the North and South of it. If it has no value for oil, I don't think it is worth anything.

CROSS EXAMINATION OF M. T. HUBBARD,

I don't know whether it has any value for oil or not. If it has not, it has no value whatever. I wouldn't pay 1-10 [326] part of the taxes for the whole of it. If I owned it and had been foolish enough to give the Government \$1.25 an acre, I would try to get some-

thing out of it; and if a poor Dago came along and offered me 5 or 10 cents an acre for it, I think he would get soaked, and I would take the benefit of it. I have not noticed that some Dagos have grown rich in the Elk Hills. I have never seen any there only Miller & Lux's Dagos. If they got rich it was outside of the Elk Hills.

I got the names on the maps from Mr. Sidert. I could not tell where he got them. He gave me the location notices and I found the corner stakes, and myself and another man put up stakes 15 or 20 feet inside of the sections, and built a mound of earth and put the stakes into it and posted those notices with the names on. I didn't make the locations, I was merely the instrument in finding the stakes, and the man that was with me built the mounds and stakes and put the location notices on them. I saw two of the men whose names appear on that map on that ground. There might have been more, but that was all I saw. I don't know anything about any of the persons named on the map outside of the two I have mentioned, ever being on the ground. I don't know whether they did any work there or not. I couldn't say whether they did any development work or not. All this map stands for is a list showing all the names that I and the other man put on the location notices of that ground. I didn't look for discoveries of mineral. Didn't try to find any. I didn't know of a single discovery of mineral of any kind or form made on these locations. I didn't see any.

I didn't look to see asphaltum reefs. I was looking for section stakes. The surface of the country was very rough and rugged. I examined it as I ordinarily do in going over a country. I didn't look for any oil seep. I didn't make the locations. I don't know whether the locations were made in [327] Bakersfield or elsewhere off of the township or anything about it.

REDIRECT EXAMINATION OF M. T. HUBBARD.

It is not customary for surveyors employed as I was to make locations for themselves or their own benefit. If it had been entirely proper at that time to do so, I undoubtedly would have made locations for myself.

N. C. FARNUM, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am 57 years old. My family live in Oakland, but a good deal of the time I live in Bakersfield. Not all the time. I have made Kern County, California, my residence or headquarters for about thirteen years. My business interests are largely located in that County. I have been engaged in buying and selling lands and in contracting, and the manufacture of brick. My business has been mostly connected with oil lands. In July, 1899, I became interested in oil lands in Kern River field, through purchase from the Railroad and other owners and also by locations. In the same year I purchased some lands North of Mc-

Kittrick and located a large tract of land to the East of McKittrick. Also, in that year and the following, I purchased some railroad land to the Southeast of McKittrick. I have been generally in that business since that time. Almost continuously. We have oil property in 28-28, have land in 30-22 and 28-20, and are interested in some oil companies along the West side, by the reason of owning some of their stock. They are the Straud Oil Co., the Sunset Security. I believe that is all that I recollect now. Those companies are engaged [328] in the oil business in Kern County. We have 26 wells on Section 21-28-28, Kern River Field: we are drilling a well on Section 36-30-22; we have 80 acres in the Belridge district in 28-20; 80 acres in 15-28-22; 160 acres in 11; 80 acres in 4, and ½ interest in 20 acres in 17-28-28 and 320 acres in 11 No. 20 W., S. B. M.

I am acquainted with Mr. Blodgett, who was on the stand during the past week, and the associates he mentioned as having made locations in the Elk Hills. I knew them all. I knew a man named Silas Duee (Drouillard).

I first became interested in what is known as the Elk Hills in Kern Co., in December 1899. That was the North group of Hills, just East of McKittrick. There are two groups of hills East of McKittrick. The Elk Hills are the more northerly. They lie in a district East of McKittrick extending to Buena Vista Lake. I was in the Elk Hills in 1899. First went there with Thomas Brown, who was superin-

tendent for Miller & Lux and was located at their headquarters' ranch just north of the Elk Hills. The reason for my going there was that I had discussed that country with Mr. Brown, knowing that he was thoroughly familiar with it, this first conversation taking place in Bakersfield, and he requested me to go out with him to the ranch and we would get horses and ride over the hills together, and make an examination of them. That was after the Kern River excitement. The first well in Kern River was brought in in May, 1899, and this occurred in November, 1899.

I made a detailed examination of the Elk Hills at that time; we rode over them pretty thoroughly. We went over the whole hills. At that time we did not know what township they were in, but we visited nearly every section of it, I suppose, at that time—we were over nearly every section. We made a very thorough investigation, looking for oil sands that might [329] crop out, or gypsum—anything in the way of a material upon which we could base a location, with a view of taking the land up, under the placer act.

I went to a place indicated by Brown, where I found what is termed, brea, which is material that oil has been in there once, but has dried out—evidence enough to me that there had sometime been some oil in this piece of ground, on the surface. That was in a canon, it extended quite a distance down the canon from what is often termed a "blow out" or gas fissure—probably was a gas fissure; and to the

North of it the anticline is exposed, and to the South of it, this gas blow out.

The slopes of the anticline were very perceptible on both sides. One dipped to the Northeast and the other to the Southwest. I afterwards determined the location of the oil sand I have mentioned to be in Section 32-30-24. During the examination I made with Brown, I didn't find any other indications of the existence of oil at any time in those hills, other than those I have mentioned. We found to the Northeast of this sand in 32, evidence of an anticline, from the fact that the land was somewhat different, in a direct course running Northwest and Southeast. This land was mineralized by gypsum and fuller's-earth.

The anticline appears to follow the ridge of the country, the backbone, from the Southeast to the Northwest, leading up to and connecting onto the hills immediately North of McKittrick.

I am very well acquainted with the gap the railroad comes through to McKittrick. It is in 14-30-22. There is a well defined anticline there. I didn't discern both slopes of the anticline there. You could see the northern slope of it. There is evidence of waste oil there; dry oil in the sand there. [330]

The sand at the oil seepage in 32-30-24 had been saturated with oil. I tested it.

I have been on a great many visits to the Elk Hills besides the one I have referred to. I was there three times before Dec. 12, 1904. I made examinations during those different visits on each occasion. I went there for that purpose. We proposed to locate them before the first of January, 1900. I took other means of satisfying myself about the hills aside from my own personal examination. At the conclusion of my examination, in 1899, I was satisfied that there was a fair chance of getting oil there.

I was all over T. 30-23, in the hills and on the flat I think I went over every one of Sections 15, 17, 19, 21, 23, 25, 27, 29, 33 and 35, of 30-23. The opinion I have mentioned as to the oil character of the lands in the Elk Hills included the lands of these sections, and, also the even numbered sections between those odd numbered sections I have described.

In addition to my own examination, I had the opinion of William Youle as to the character of the lands. He was Superintendent for Jewett and Blodgett in the oil business on the West side of Kern County, and was regarded as a mining and oil expert, and I so regarded him. He had charge of all the holdings of Jewett and Blodgett on the West side; a great many sections of land that they had leased from different parties, covering a good many thousand acres. At that time they were the most extensively engaged parties in Kern County in mining and developing lands for oil.

Mr. Youle made an examination of the lands in the Elk Hills at the request of Solomon Jewett, Mr. Blodgett and myself. They were interested with me in my enterprise in the Elk Hills. This was preliminary to proposed locations under the placer act. Mr.

Youle's report was made to us verbally in Bakersfield. He made [331] a very favorable report to us—stated that there had undoubtedly been oil in this canon, on Section 32-30-24, and that the country between there and Section 14, in 30-22, where the anticline is exposed by the action of the water, had the appearance to him of oil land, and, having the indications at the Southeast and the one on the Northwest led him to believe that there was an opportunity to develop oil there on the ground.

I am acquainted, from my examination and personal observation with the character of the formation in and about the West side field where oil has been proven to exist. There had been development of oil along the eastern flank of the Temblor Range from North of McKittrick two or three miles to the Sunset field; a well defined anticline to the West of McKittrick, extending for four or five miles from Section 27-30-22, to up through Section 10-30-21. At the time I thought the Elk Hills was a spur from the Temblor Range. I have heard it variously discussed by people who claim to be geologists, that it was such a spur, and I have heard that controverted by others who were supposed to be equally well informed, who claimed that it was an anticline laying forward or superimposed on the McKittrick anticline. time the development of oil in the McKittrick and Sunset fields and the land intervening along the flank of the Temblor Range was in the hills. The furthest well to the Northwest at that time was a well of the U. S. Oil Co., on Section 6-30-22, to the Northwest of this seepage on Section 32-30-24.

The examination I had with Mr. Brown, the oil sand I have described as having been found in the formations I have mentioned, the strike of the anticline, the development of the hills on the eastern flank of the Temblor Range and the general character of the uplift in the Elk Hills, had an influence in fixing my opinion as to the oil character of the Elk Hills. [332] That was what first attracted my attention to the Elk Hills-its proximinty to McKittrick, laying in the position they did to the McKittrick anticline. I formed the opinion absolutely that the territory in the Elk Hills was oil territory at that time. I have had no reason to change that opinion since, and still believe it to be oil territory. The fact that operations were confined to the hills rather than to the flats, called the attention of oil men to the possible character of the Elk Hills, in 1899. The universal custom outside of the Kern River field was to drill as near to the anticline or the foot of the hill as you could set a derrick. Most every one was afraid to go out in the flat from the fact that we had all been told, and believed, that the oil might be from 5000 to 10,000 feet below the surface. There was no development in the Elk Hills in 1899. Since that time there has been development; several of them. There is a well on Section 30, of 30-24 and a well on Section 26. of 30-23.

There was oil excitement all over Kern County in

1899 and 1900. I recollect the excitement very well. It began immediately after the discovery of oil in the Kern River field, which was, as I recollect, in May, 1899.

I know that the Southern Pacific Railroad Co., was at that time having its lands examined and segregated by an oil expert for the purpose of withdrawing the land from the market. I talked with Mr. J. B. Treadwell on several occasions, during the years 1900 and 1901, in regard to purchasing oil lands from the Company. He had charge of the Southern Pacific oil development in Kern County. That included lands which fell to the railroad by the grant of July 27, 1866. Mr. Treadwell was general superintendent of oil matters for the Company down there. He drew checks for the payment of bills, ordered work done and material bought, and he told me that he reported very strongly [333] to the Railroad Company against the selling of any of their lands, and that if he had been in the position, or on the ground, we would, none of us, ever bought any of the oil lands from the Railroad Company.

At the time of the oil excitement, the Railroad had disposed of all its lands in T. 28-28, with the exception of, I think, some in 3, where Mr. Treadwell had his oil camp and was drilling. After that we could buy no more land; it was all sold in that field. Then we commenced to took over the balance of the local oil field in Kern County to get other land from the Railroad Co., at the price of \$2.50 an acre that we paid

for the land in the Kern River field, where we bought about four sections, I think; and we turned our attention to the land around McKittrick as the next most likely place. We looked the country over from McKittrick Southeast to Sunset; made application for four or five sections at that time. Two of them we were able to purchase; the balance of it the Company declined to sell. We did the business with Mr. Jerome Madden, land agent for the Southern Pacific Railroad Co. He said that the lands were withdrawn from sale by orders from New York.

On the strength of the report I have mentioned as coming from Mr. Youle and on my own personal observations, we made locations in the Elk Hills. We located all of the land in T. 30-23, 30-24, 31-23, 31-24, that was not patented at that time, both odd and even sections. We spent money in making those locations and in attempting to perfect them. We discovered on investigation at the Visalia Land Office, that much land in all four of these townships was unserveyed. We immediately took steps to have the land surveyed that we might locate it properly, by setting stakes in each corner and center stake in each section, mounding the land at the corners and placing location notices on each 160 acres. To my recollection [334] about 42 sections were included in the 100 locations we made. We purchased locations in 30-23 from Drouillard and his associates. we started to locate the land in T. 30-23, we discovered upon portions of sections 15, 23, 24, 25 and 26, locations that had been placed there about one month previous to the time we started to locate.

M. S. Wagy, Si Drouillard, Tom Baker, Jeff Packard, Roy Wagy and Charles Lamont were the locators of the land I have just described. I am not positive what we paid for M. S. Wagy's interest in those lands. I know we paid quite a sum of money; but we didn't buy the interest of all of these locators. Mr. Baker's, Mr. Lamont's and Jeff Packard's interests were transferred to the Wagont Oil Co., and represented by a certain amount of stock. The other locators, the two Drouillards wanted to go to northern Nevada to mine. We paid them cash for their land. We also paid the two Wagy boys. My idea is that we paid out about \$3,200.00 to those four locators. I am not positive in regard to that.

We kept up the locations we made until 1906. We built some roads through the country, as it was necessary to get into our camp and cut over the land, which was very rough, and had men dig holes, which at that time was considered doing assessment work. That was the universal practice in Kern County. The annual assessment work consisted of building roads, digging holes, six, eight, feet deep, six by eight or ten feet square. That was considered work enough to hold 160 acres. We established a camp there, and maintained, at all times, at least one man there, sometimes as high as a dozen. We had to keep their camp supplied. Where we had this camp it consisted of a oneroom house about fourteen feet square, and a stable about the same size, as we had to haul our water into the hills for the animals we had there, for the men, all our feed and the provisions. We had to have a road that we could get a wagon [335] over. At the termination of two years, our land having been recorded on the first of January, 1900, we re-located in 1902 and 1904. It was sufficient to have men—considered sufficient to hold the land at that time. We followed the custom. I have been told custom makes law—but I don't know whether it does or not. So we followed the law the other fellows did; and none stopped us. And, as a general rule, most everyone respected the other fellows' locations.

When we first began those locations we had surveyors in there. About twenty or twenty-five menperhaps thirty. I have forgotten how many. I know there was a big lot of them. We wanted to make them in a hurry, because there were several trying to do the same thing; and, as a general proposition, we got ours on first. We saw to that. Our object in making these locations was to acquire land for development, as we sincerely anticipated doing. We made arrangements to carry out our purpose in actually drilling for oil. We had a drilling outfit, derrick and complete outfit on Sec. 24, T. 28-28, in the Kern River field, where we had been unable to find oil and got water, and we had instructed Mr. Youle to move that rig from Kern River into the Elk Hills to prepare for drilling. That was the purpose of all my associates. That was the universal wish of the company. We were prevented from bringing the rig over from the Kern River field because the Government had at that time just withdrawn, or about that time, had withdrawn, this land.

In 1902 there was a very perceptible depression in oil. There was a great shortage of cars. In 1900, '01, '02, '03 and a portion of '04, I was engaged in the manufacture of brick, as among my other occupations, and was quite a heavy user of oil as we burned our brick with oil. In that period of time I manufactured and sold twenty-five million of brick in Bakersfield, and we frequently had great trouble in getting oil [336] into the yard in time to save our kilns. I, on several occasions, went to Mr. Burkhalter personally and stated the facts to him and he very kindly ordered S. P. cars that were loaded with oil set out on our spur that we might use it, I sending the cars back to the Kern River field and having them loaded with oil for the Southern Pacific account and paying for the oil in that way. This occurred during all those years, and very frequently. It made it very difficult for us, even as the Company was with us, to keep our plant supplied with oil. The lack of Railroad transportation and facilities had something to do with the general depression of the oil business.

I had a great many people who were interested in oil properties look over our lands in the Elk Hills, during the years 1900, 1902 and 1903. Among them a man named Bartlett, from Boston, who was then interested in drilling some wells in the Sunset fields on Section 2. I have forgotten the name of his Company. He came to me in Bakersfield and expressed a wish to lease some of the Wagont Oil Company's lands. We drew up a lease that was satisfactory to both parties. He stated he had a number of friends

in Boston with means sufficient to drill wells and they were anxious to and would lease this land and drill it. I don't remember who he had as an expert. He had an expert with him who made an examination of the lands I have described in the Elk Hills, including our holdings in 30-23. Mr. Bartlett stated to me that the agreement to lease those lands was based on the report made by that expert. The arrangements were not consummated and they did not start drilling on those lands when they discovered that the lands were withdrawn by the United States Government; they discontinued to spend any money there. He was one of several who tried to interest themselves in the same land, in the same way, and with the same result.

I know Mr. Hilbish, spoken of by Captain Frank Barrett [337] on the witness stand the other day. I considered him no oil man. In 1900 he owned Sections 11 and 12 in 29-21, North of McKittrick. They were out on the flat about four miles North of the range extending through townships 30-24, 30-23, and 30-22, along this Elk Hills anticline. We didn't consider them oil lands. We thought when they started to drill there that they were—had more money than they knew what to do with.

Mr. Hilbish was interested in the oil business. He owned that land and was the largest stockholder of the Co., but unfortunately for them, when they got their well down some seven or eight hundred feet, their treasurer ran away with \$10,000.00 of their money

and they stopped work, and, as the condition of the oil market was then very low and they were then seven, eight miles away from the nearest transportation, they didn't do anything more with the land. Mr. Hilbish went to the Philippine Islands, and died there. His land was sold for taxes in 1905, I think, for a nominal sum, to George Hay, a man by the name of Eyrod and a man named Jordan. About one month ago one of the members of the Esperanza Oil Company bought a portion of that land and paid him \$350.00 an acre for it. It was good grazing land. They are drilling an oil well there now. He purchased it for oil.

I made an attempt to purchase lands from the Southern Pacific Railroad Company—I think, in the winter of 1900 or in the early part of 1901. Mr. Madden declined to sell the land. That was Section 25, of 30-22. He stated that the land had been withdrawn from sale, under orders of the Southern Pacific expert or his subordinates. We had purchased the locations in 26-30-22 from a man by the name of Hotchkiss and N. P. Chipman, paying them \$1,000.00 for their locations, and we immediately took possession of the land, fenced it, put up four derricks and spent several thousand dollars there. After our [338] hard times in the oil company, we let the land lay idle, but kept a man in possession all the time, paid our taxes on the improvements we had on the land, and in 1899 started drilling and now have a well down about 2500 feet. We were desirous of having this patented land lying to the West of us, adjoining us, to give value to our located land. At that time we desired to put it in the Company and sell stock enough to drill the land up.

I met J. Owen, who has been characterized here by some of the witnesses as an oil expert for the Southern Pacific Railroad Company. I was introduced to him in Bakersfield about the beginning of 1903, by my son, who had known him some time; and after I had been introduced to him in Bakersfield we talked a little while and I said to him: "Mr. Owen, I presume I have you to thank for the loss of the land in Section 27 in 30-22," which we had located and formed the Washington Oil Company, in the early part of December. We located that land in December, 1899. We fenced the land with a two wire fence, and put three derricks up-one derrick on the NW1/4, one on the NE1/4 and one on the SE1/4. The SW1/4 and SW1/4 of the NW1/4 was patented to the Southern Pacific. The balance of the section, according to the records of the Visalia Land Office, at that time, were government lands subject to location. We so located, fenced it as I have stated, put up the derricks, and within a short time a gentleman by the name of Rial, from San Diego, who is an attorney there, came to Bakersfield looking for location of land on which to drill wells for a company that was formed there. We made him a lease on this Section 27. He started drilling and drilled a well to the depth of about 800 feet, at which time he, as well as ourselves, were notified that the land had recently been patented to the Southern Pacific Railroad and we were requested to leave.

After I had accused Mr. Owen of being instrumental in taking this land away [339] from us, he stated that Mr. Treadwell was responsible for that, as it transpired as he came into that field.

We discussed the country around McKittrick. We were then at work on 26, and I asked him, he had the reputation of being a geologist, what he considered the prospect of our getting oil in 26-30-22, and he said: "Your section 26 is better land for development than 27," according to his opinion. He stated he thought the whole country from 30-22 clear to the lake was oil territory; as he had examined them carefully. That would include Townships 30-22, 30-23 and 30-24. That was in the year 1903, I think, in the Spring.

I have dealt somewhat in oil lands in the McKittrick field and in the fields adjacent. I have been on every Section of 30-23, I think. If I had a patent to the odd numbered sections in 30-23, which I have described, the land would be worth, at a conservative estimate from \$100.00 to \$150.00 an acre.

CROSS EXAMINATION N. C. FARNUM

T. 30-23 has a value as oil land and nothing else, oil or gypsum or fuller's-earth. It has some gypsum. We never sold any gypsum. We tried to sell some we dug off of 36-30-22 but never off of 36-30-23. We never tried to sell any fuller's-earth.

Patented land in the vicinity of McKittrick is worth a good deal more than from \$100.00 to \$150.00 an acre if there is any oil well on it. Most of the sections over there that are patented belong to the rail-road, now, where there is any oil in them, and you can't buy them. Oil land in the vicinity of McKittrick is worth from \$150.00 to \$1500.00 an acre. Some of it more than that. I mean, now, without an oil well on it. Land close up to the outcropping is necessarily worth very much more than that some distance from it, and was so regarded in [340] 1900; by reason of transportation.

If you have to haul oil in a wagon or oil tank fifteen or twenty miles, as many of them have to do, it does not pay very well to drill wells. If you have a pipe line at your door, as we have now through most of the fields, or have a railroad that is easily accessible, where you can build a short pipe line of your own, it is a different question,—it makes the oil business profitable; otherwise not. The existence of a well on Section 26-30-23 in the Elk Hills, and also wells in Section 30-30-24 and Section 24-30-23, has its effect upon the value I have placed on the lands. figuring the values in the light of the fact that it has been demonstrated beyond doubt that there is oil under the ground. At the time we located it it had not been demonstrated, but we did expect to demonstrate it. I paid \$15.00 an acre in 1904 for lands located further away from any known well than the land in the Elk Hills is. I bought two sections in 28-30, paying \$15.00 an acre. There was not an oil well, at that time, nearer than 6-30-22.

In December, 1904, I would gladly have paid

\$100.00 an acre for a section of patented land, either 23, 24, 25, 26, 27, or 15 or 17. If I was not going to develop it for oil I would not want the land at all. I would gladly have paid that for experimental work. At that time it had no value as actual oil territory.

I didn't, at that time, know it contained oil. We knew then that we had a seepage to the Southeast of us, the oil well on Section 6, to the Northwest of us, with a continuous line through, showing-and, along this line, fuller's-earth and gypsum, the changed condition of the ground showing, indicating beyond a question in my mind an anticline or uplift. Therefore, we were willing to and would have drilled on one of these sections I have just spoken of that we bought from these locators had the [341] Government not withdrawn the land from us and made it impossible for us to know whether we would ever get a title if we got a well. I know my associates did not, at that time, regard the land as merely a prospect; we considered it better than a prospect. We spent a good deal of money there, and a man don't usually spend a great deal of money on a prospect. We were assured in our own minds as well as we possibly could be without drilling, that it was an oil territory; and I still consider it as such. And, not only that; the drill has proven since that our theory was correct. I don't know whether we would have gone ahead at that time had we known that we had to go to a depth of 4000 feet to get oil. I doubt if we would have gone 4000 feet at that time. I knew of no well in this country 4000 feet

at that time. There was one in the McKittrick field that was somewhere between 2000 and 2200 feet, and we thought that a wonderful well—a very successful driller-a man that was able to get a hole down that far, in that country. Therefore, if we could have bought patented land along there, we would not have located the other land, but there was no patented land we could get where we wanted it. The railroad had patented land along the North part of the township-I think 1, 3, 5, 7, 9, 11, and possibly 13. I had the records searched at Visalia, and the map showing all the patented land in those four townships, and we made our locations through the township according to the records that we found there. If we had had choice of all the land and known that in order to find oil, we would have had to go over 3000 feet, possibly 4000, I think we would have taken the land and trusted to luck. As to whether land, under the conditions then existing, could have been economically drilled I will say that it would have been an expensive proposition. We recognized that fact, but we were willing to start one well in there and put it down just as far as it could be put down. That [342] was our firm determination—to drill a hole there, to start with big casing and drill a hole as far as it could be carried to test that territory for oil. We didn't expect to go 4000 feet deep. If we had known positively before hand that we would have had to go that depth, we would have started a well, for this fact -if somebody else could put a well down 4000 feet and demonstrate the possibility and advisability of it

as an oil proposition, we would have followed their footsteps. I don't think there was a well that deep in California. There was one back in Pennsylvania about 5000 feet, but it was a very expensive well.

Knowing all the conditions then existing, we would have sunk a well for the reason that we had determined to drill a hole in the Elk Hills no matter what it cost us, as far as we could go and as far as money would go. That was the absolute determination, not to be deviated from, until the Government withdrew the land.

We held the claims until 1906. The Government withdrawal was removed in 1904, I think. We didn't go ahead after the withdrawal was removed. The conditions changed very materially from 1901 and 1902 as you come down to 1906. Money was hard to get. The price of oil was so low it did not pay to produce it. The transportation conditions were inadequate. Neither of the railroad companies were in a position, evidently-if they were they did not evidence it-to furnish cars to transport the oil to market. These conditions, so different from what they were in 1900 and 1901, put a different phase on the proposition of spending \$40,000 or \$50,000. It was easier to get cars in 1900 than in later year. It seemed that the injection of the Associated Oil Co., into the oil proposition in Cal., affected the transportation business materially, as they were buyers of oil as well as shippers. [343]

It is not a fact that the transportation facilities, both on railroads and by pipe lines, improved from year to year, as far as obtaining cars is concerned. We saw new cars every year; we knew they were increasing their rolling stock, we knew that there were new pipe lines being built; but notwithstanding that, there was a long period there when it was almost impossible for a man who was not connected with the Associated Oil Co., or some of the other—one or two—of the larger corporations, to get cars to handle his oil. That was one of the reasons why our company determined not to sink a well after the Government removed its restriction. Another reason was a lack of money.

When we determined in 1899 or 1900 to sink this well, we expected to derive a profit from it. We didn't know that it would be necessary to go 4000 feet and were absolutely considering the profit end of the venture. I don't know that I ever heard it discussed as to whether it would be a profitable or even possible venture to sink a well in that country over 2500 feet deep, but I have no recollection of it having been done at that time. But we had positively determined to sink a well there as deep as we could go. We expected to go at least 2000 feet. We were fully convinced of that. I don't recollect whether we expected to go any further than that or not. I know that we considered the territory at least 2000 ft. territory and were prepared to drill a well there notwithstanding that. We considered it about 2000 ft. territory. We had a good many opinions expressed on it by men who pretended to be able to express an

opinion, and from these opinions, we considered it about 2000 ft. territory. Our determination to sink a well was based on the best information and advice available at that time.

We located all the land we had in four townships. At least 42 sections. We didn't make a discovery of oil on any of [344] them. We didn't know that any of them actually contained oil and we made the locations for the purpose of prospecting and developing that country for oil. That was why we took up the ground for oil.

In addition to posting location notices, having surveys, and constructing roads and a few buildings, we dug some holes along these places where gypsum was exposed, and fuller's-earth. Wherever we found the sand that we thought might indicate something we had some work done on it. These holes were dug for annual assessment work, for the purpose of holding the ground as an oil prospect, with a view to seeing what we could discover while we were doing it. We had to do the work somewhere on the quarter section and we preferably did it where we thought it might indicate something to us. It did indicate that we had some fuller's-earth and gypsum. It didn't develop any oil. We did not make any effort to market the fuller's-earth or gypsum. We were interested in the territory purely from the standpoint of its oil and mineral possibilities. We did not try to market the fuller's-earth and gypsum because we could not do so profitably.

As to the indications that induced us to locate that territory in 30-23, I will say: The fact that at the southeastern extremity of the land in 30-24. Section 32, was what we have termed a gas blow-out, with an anticline and a syncline showing in the canyon, the material surrounding the gas blow-out proving by a very simple test to determine oil assured us that there had been oil in that portion of the land at some time. On the northwestern extremity of that anticline, in 30-22, Section 6, the U. S. Oil Company had a well producing oil in sufficient quantities to make it valuable: and the McKittrick Oil Company immediately to the West of them, having a well which at one time produced as much as 200 barrels per day of 24 hours, [345] assured us that in the intermediate territory between these two indications that we discovered there, in all probability was an oil-bearing zone. That was the reason we made the locations. We made them as a result of oil indications over in township 30-24, and in Section 32, and Section 36, 30-22.

These indications we had discussed with men who were geologists, men who were experienced oil operators; and I have no recollection now of any men who went into that country, saw these two points that I have described, but what he was satisfied that in the intermediate territory between them was an oil-bearing zone, and the sands as a usual thing are continuous sands—there is no disturbance to show they have been rolled, turned over and gone the other way—and for that reason, our own conclusions and the advice

we had got from men who were more expert than we were that in all probability it was an oil country, we went to work in it.

We would not have located the territory merely for the fuller's-earth or the gypsum.

I went over 30-23 very thoroughly, and have no recollection of finding any oil seep in that township. The anticline that shows in 14 in 30-22 in the canyon where the railroad passes through in going from Lokern to McKittrick, my recollection is—my best recollection—that as we follow that anticline as far as it showed there is a seepage of oil. Now, whether it is on 14 or the next section, 13, I am unable to say. That was in the township immediately West of 30-23.

I have no recollection of asphaltum reefs in 30-23. I have seen sandstone, what is usually termed a cap rock, that was discolored. Whether this discoloration occurred from oil that had been in it or not, I never made an investigation. I saw that cap rock, I think in 27 and 33, according to my recollection of it now, in the South portion of Township 30-23. I don't [346] recollect seeing any asphalt anywhere in that township.

As to the evidence of an anticline in Section 14 in 30-22 near the railroad, which I have mentioned, it was my recollection that I didn't find more than one flank or slope of it. I found both slopes of the anticline well defined in 32, 30-24, in the gulch where the blow-out occurred. The one on the northern portion of the canyon North of the gas blow-out had a slight

dip, perhaps ten degrees, to the Northeast. The one to the South of the blow-out has a corresponding dip to the Southwest. The angles were quite uniform. I have no recollection now as to the extent to which the anticline to the Southwest was revealed. We concluded that it was a true anticline and a syncline.

I discovered anticlines in the Elk Hills, one in 32, 30-24, and one in 14, 30-22, which were undoubtedly the same anticline.

In May, 1899, a man named Elwood discovered oil on the banks of the Kern River in 20-28, about fifty miles from the Elk Hills, and the immediate effect of that discovery was that people who had never thought of oil even, saw an opportunity probably to become suddenly rich, and were anxious to acquire land anywhere there was a possibility of getting oil, and they made locations in 28-28.

I think we were the first to go over into the Elk Hills to locate, except the men we brought out; we saw no evidence of anybody else being in there. That was in 1899. I think that Dr. Sylvester followed us in making locations.

I think the oil excitement began in the vicinity of McKittrick in 1899, and lasted a couple of years or until some time in 1902. During that time there was an influx of people into that vicinity, many of whom had no experience in the oil business. I, myself, had had very little. These people made [347] a great many locations. There were locations made on the flat South, West and Northwest of the Elk Hills.

I do not think that during the oil excitement there were locations made on practically all of the available land within a radius of ten miles of McKittrick. Most of the locations followed the trend of the hills, which is practically Northwest and Southeast. We, and others, have been induced to believe that we must confine ourselves to hill land from the fact that it was possible to reach oil sand at less distance there than out on the flat.

The people did not make locations for a considerable distance in all directions from McKittrick; I think I am stating the fact to you as far as I know it now and as I recollect it—and I kept myself very familiar with the work that was being done on assessment work, and locations around McKittrick and around Sunset, and in the immediate surroundings of the Kern River field, which was about the only territory we had at that time where a well was drilled.

I first became interested in oil property near Mc-Kittrick by scripping four thousand acres of land— I think about the time we located in Elk Hills. The land scrip was located in townships 30-21 and 30-22.

The first development we ever did was in Section 21, 28-28, Kern River. We struck oil there. We had quite a lot of other property in the Kern River field and the country surrounding it. We only developed in Section 21, where we had 26 wells, I think, if I am not mistaken, and we started development up on 34, and struck an enormous amount of water and stopped work.

We proposed to move the derrick from that well down into the Elk Hills, but didn't do so because the land was withdrawn by the Government from entry then, and after the withdrawal was removed, we didn't have the money to begin the development [348] there, and I had entered into a contract with the Standard Oil Co. which employed all of my time. I talked with Captain Cummings, who was a special agent of the General Land Office, about the withdrawal and he told me that if the withdrawal was released our rights would be restored. He was around there about two or three years.

I don't claim to be an oil expert at all. I have had very little experience in the development of oil properties up to 1905, and knew very little about it except from observation and conversations with men who were working on properties in which I was interested.

I use to go to Sunset very frequently with Mr. Jewett. We would drive out there and remain two or three days, and during that time, I would talk with the men and observe what was being done, examine the country around, the nature of the rock. I was then trying to educate myself, looking for information myself.

A great deal of the work then being done by Jewett & Blodgett was being done because they were obliged to under their lease from the locators of the lands they were operating on.

From 1899 to January 1, 1905, lots of wells were

being drilled-lots of people were under contract, like Doheny & Canfield. They had a contract with the Santa Fe for a dollar a barrel for oil, 100 barrels a month. They could not stop operations. The Kern River Oil Company, the Imperial Oil Company, the West Shore Oil Company, the Kern Four and the Black Jack didn't stop operations because a great many of them were operating on leased lands. They were not all operating on leased lands. There was lots of development going on, but not so much as would have been had conditions been different. There was undoubtedly quite a good deal of development going on all the time. A good many of them were under leases, and were compelled by the conditions of their leases, to drill so many wells a year. Other men had contracts for the sale of their oil at a good price, [349] and they were very anxious to fill them. I think those two classes included all who carried on development work from 1899 to 1905. I think there were some others outside of them.

The reason we did not go ahead and sink a well in the Elk Hills was, as I have before stated, the fact that the Government had withdrawn the lands; and when the withdrawal was cancelled, some of the men, and myself as one of them, didn't have as much money as we did in 1900. I have been buying land.

I had negotiations with Mr. Bartlett, which I have mentioned, in 1900. We eventually sold him a quarter section of land after his people had turned down the other land on account of the withdrawal. I tried to interest a man named Havens of San Francisco in the lands,—also a man named Edwards, who had been in the employ of the Standard Oil Company. We went out and spent a couple of days looking over it, and he was positive he could interest lots of people in leasing from us, but he did not.

We spent about \$20,000 altogether on this land in six years. We didn't attempt to do all of the assessment work; we didn't have the money to. What we wanted to hold was what we considered the best land, the land that was most likely to be oil lands. We probably did assessment work on a quarter of the claims we held.

I met Mr. Owen in Bakersfield in 1903. We discussed the general trend of the Elk Hills. I asked him whether he thought we would likely get oil, and he said "Yes"—I don't know his exact language. He said something about the depth we would have to go, but I can't say what it was now. I am not sure whether he said it was three or four thousand feet. I think he said it would be deep. I thought myself it would be at least two thousand feet, but Mr. Youle always contended it was shallow territory by reason of the uplift. The hill, he said, made an uplift; it was [350] not caused by erosion, but by an elevation from below.

RE-DIRECT EXAMINATION OF N. C. FARNUM.

We had a camp in the Elk Hills and maintained possession, I think, from the time we made our lo-

cations until about 1906. We were in possession of the locations in 30-23.

We purchased quite a lot of land from the railroad company in the Kern River field, and tried to purchase, 25, 30-22.

After Mr. Treadwell, who was oil expert for the Southern Pacific Railroad Company, began his system for withdrawing lands from market, we did not succeed in purchasing other lands from the company except two sections in 31-24.

He stated that he authorized or insisted upon the withdrawal of lands of the Southern Pacific Railroad Company in Kern county that he considered valuable for oil, and that he had a conference with Mr. Kruttschnitt and Mr. Huntington over the proposition, Mr. Kruttschnitt differing with Mr. Treadwell, and Mr. Huntington decided in Mr. Treadwell's favor—that the lands should be withdrawn.

We tried to purchase land in 25, 30-22 in the Elk Hills, but were not able to do so at any price. Mr. Treadwell said they were not for sale.

I was interested in an application for six sections in township 19-11—five and a half or six sections. The first payment was made and accepted, and a receipt given for it, but the deeds were never transferred, as the San Francisco office said the New York office would not consent to giving any deeds, and the money was returned. That was because of the proximity of the land to an oil field. I knew H. L. Packard; I was in Mr. Madden's office in San Francisco

while he was land agent for the Southern Pacific Railroad Company, with Mr. Packard, in 1900. [351] Section 16, 30-23 sold in 1910 for \$150 an acre.

RE-CROSS EXAMINATION OF N. C. FARNUM.

Last year a crop of barley was raised on part of section 16, 30-23. There was some level land lying on it.

I was living in Bakersfield in 1904. The ECHO and the CALIFORNIA newspapers were published there at that time. I think I took both of them. At that time I was very familiar with the townships in the Elk Hills.

In 1900 or in 1901 I tried to purchase all of section 25, 30-22 that was owned by the railroad company. It was on the west slope of the Elk Hills, the very small part of it in the flat. We did not attempt to purchase any in 30-24, but we did attempt to purchase in 31-23 and 32-23. [352]

PARKER BARRETT, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am an oil operator and engaged in the brick business in Kern County. I have been in the oil business since 1900 at different times, not continuously. I was at one time connected with what is known as the Lake View Gusher. I located the ground on which it is situated, and assisted in promoting it. It is located on fractional section 25, in 11 north 24 west.

The time that well was produced I presume it was as large as any other well in California. It had an average estimated production of about fifty thousand barrels for the first six months. That was an especially large well in those days.

I have been interested in other oil property—in section 32, 32-24; in 30-11-23, and 8, 11-23,—and in other properties.

I have been interested in lands in the Elk Hills. I think there were three sections in a line in 31-24, and perhaps some in 31-23. I think I first went to the Elk Hills in March, 1909. There were no actual drilled wells in operation there at that time, and no oil had been produced.

I know of an oil seep in the northwest quarter of 32, 30-24, and have seen it.

The Elk Hills were apparently in the same condition when I was there in 1909 that they were in 1904. There had been nothing done to them. There was nothing on them except one cabin I could see, on section 32, just above where this seepage or discoloration of the ground, of the sands, was.

That seepage assisted me in my knowledge in thinking that the lands were good oil lands. I had already determined that it was oil land before I went there from talking with different geologists and men who had been there. I had heard of this seep-[353] age a good many years, was one thing that made me think that it was probably good. I think I talked with a dozen geologists—with Dr. Fairbanks, Dr. Ochsner, and Dr. Owen of the Southern Pacific, and with others,—I can't call their names—that were sent there by my associates. I think my first talk was

about three years before I went in there to make locations.

I had a conversation with Dr. Owen in Bakersfield. First, he did not pretend to know anything about that country. He kept asking me questions. And after I had answered him and talked to him quite a while, and answered a great many of his questions, I told him that I knew he was more familiar with most of the country than I was-knew about it, at least, and he admitted that that was the case, or at least that he had been there frequently. When I went into the Elk Hills I formed an impression of the oil character of the land from the general appearance of the hills and the country, as compared with others. I have not had any reason to change my opinion since that time as to the oil character of these lands. think I had as good an opportunity to judge in 1909 as to the character of these lands as a man could have had in 1904. I don't think there was any difference in the appearance of the country.

I know of oil seepages in the vicinity of the hills—there is a gas blow-out in section 11, 32-24, which I first saw shortly after the first of 1901. From Sunset to McKittrick, along the line of the eastern flank of Temblor Range, I have never seen anything that I really called seepages. In Maricopa there are some seepages. I saw them I think about 1907.

In 1909, at the time I visited the Elk Hills I was acquainted with the asphalt in 30-22, around McKittrick. I had known them before that.

I have frequently been on the train between Mc-Kittrick and Bakersfield. I know where the train passes through the gap on Section 14-30-22. I helped build the road. Just about where the road passes through the narrow gap [354] there is asphaltum beds and brea.

The Elk Hills, including 30-23, has no value for agriculture. I could not say that they had absolutely no value for grazing, but they have very little for that. Sheep occasionally range across there, and find very little food, even in a good season. My reason for saying that they have no agricultural value is, in the first place there is very little of it that lies so that even if you have water on it, it could be cultivated, and if you attempted to turn water on a good deal of it, it would all wash away. There is a little vegitation on the hills, principally scattering sage brush.

CROSS EXAMINATION OF PARKER BARRETT.

I am not interested in the Elk Hills at the present. In 1899 I made some locations and kept them up. I later sold them. They were in 8 and 9 three quarters of 7 in 31-24, and 13, 11 and 1 and 3, in 31-23, I think. I had nothing in township 30. Never did any work on them. People got there ahead of us.

I was in there in 1904. Don't know what was there then. At the time I went there in 1909, the Honolulu Oil Company was working on one quarter section of 10. I don't think they made a discovery in March.

They did make a discovery but I don't know when they made it.

That discovery had no influence on me in forming a conclusion as to the character of the Elk Hills unless I changed my mind since first seeing them. I think I have heard of the Elk Hills twenty years before 1906, but I never went there until 1909. I don't think Professor Owens asked me anything about the Elk Hills. The questions he asked me were generally in regard to the Midway. I could not have told him anything about the Elk Hills at that time because I had never been there. I was familiar with a part of the Midway. I don't remember that he asked me of the Elk Hills.

I asked him in regard to the Elk Hills. [355]

W. H. McKITTRICK, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I have lived in Kern County, California, since 1890, and during that time I was acquainted with J. Owen. I have known him since 1899. I first became acquainted with him in Eagle Pass, Texas. He was geologist for the Southern Pacific.

I went down there to meet Mr. Owen to go to Texas to look at the mine, and on his advice I invested in this property; and it did not turn out very well, and Mr. Owen apologized after that, always, for making such a bad investment for me. The next time I met him was on the Oakland boat in 1903 or 1904, I think in 1903. At that time he told me: "I am awfully

sorry about our investment down there, but I have something that I will put you on that will make you more money than the mine we might have had in Mexico." I asked him what it was and he said he was not at liberty to tell me then, but would tell me when the proper time came.

He did not tell me what kind of mineral it was, but in 1907 I met him in Bakersfield, and he said then that he was ready to put me on to what we were talking about in 1903.

He told me that he had been working out in the Elk Hills for a number of years, and that no one knew he was out there at all, and he told me to say nothing about his being out there. And he said he had been out there in the employ of the Southern Pacific Railroad, and that he had located these large deposits of Fuller's earth, and he said he would name four men, and that I could name four, and we would go out there as take as many sections as we cared for as they would all be open on the first of January, 1909; and he said to locate as many as we cared for, and then do the development work on the most likely looking deposits of Fuller's earth and then drop the others, which we did. We kept four and a half claims.

At that time he said there was a possibility of oil [356] there, but oil could not be found under 3400 feet. Of course, at that time, no one thought of going 3400 feet for oil. I didn't know of anybody else thinking about it.

At that time I was acquainted with E. T. Dumble,

who was alleged to be a geologist of the Southern Pacific Company. I had known him a number of years. In fact, I went to Mr. Dumble's office and met Mr. Owen, and talked there in Mr. Dumble's office in San Francisco, about 1907. I had met Mr. Dumble before that on the train. I don't remember just what year that was. I don't think it was much before 1907.

Mr. Owen told me on several occasions that Mr. Dumble was his partner in any venture he might make; because, at the same time, he wanted me to go into an iron proposition in Sonora. Mr. Dumble was interested as half partner with him in the venture, as he told me, and also anything that he took up. I think he told me that when we went down into Mexico in 1899.

When Mr. Owen told me about that down in Bakersfield in 1907, he said: "I have just the man we want in this, Mr. Packard, who was running a Fullers earth mill; and he knows all about Fullers earth, and we will go down and see him." So he went down to Mr. Packard's office, and he showed us his books where he had a profit between six and seven dollars a ton on this Fullers earth he was grinding out. And he said it was a fine thing, and he would go in with us. He said "if you will take the management of it and go in with us, I will go in with Mr. Owen, and I will name you and Mr. Rice."

Mr. Owen named Mr. Charles Haverkern, Mr. Chapman, Mr. Richardson, Mr. Wible; I think it was Samuel P. Wible.

After we had made our locations and done our assessment work, and after the withdrawal of the land upon entry by the President, some people jumped our land, and the Associated Oil people bought their rights or made some agreement with them. I never knew what that agreement was. [357]

I and my associates were at that time attempting to acquire patents on our locations for Fuller's earth. We did not locate for oil. We located for Fuller's earth and perhaps gypsum. I don't know for sure. I left that entirely to Mr. Owen and Mr. Packard. Packard was my lawyer at that time. I don't know as a matter of fact that we located for oil and other minerals besides Fuller's earth.

The contest I have spoken of was brought about by the Associated Oil Company, I think. Their employees gave testimony in this case, and the contest is now pending in the land office.

I believe the contest was based on an oil discovery.

They had their experts at the contest saying that it was not Fuller's earth.

I am acquaitned with W. H. Porter, President of the Associated Oil Company. I had a letter from him with reference to the settlement of the contest. A few days after I received the letter I met him in San Francisco, and he asked me if I had received it.

I think they were contesting a half section, but I can't remember just the half section it was. It is in 30-23. We had located 20, 22, 24, the North Half of 26, and the North Half of 28, 30-23, with Professor

Owen and the other associates I have mentioned. There is another half section that the contest was over. To the best of my recollection it was in 24.

The land in contest is the one on which the Associated Oil Company has been drilling a well. I couldn't say when they started to drill it. We were not allowed to go out there on account of the mounted guards, at one time, by the Associated.

The letter I received from Mr. Porter mentioned above, is marked "Claimant's Exhibit No. C." And for an explanation as to why it was so marked, I will say that it was a part of the evidence before the Land Office in Visalia, in the contest I have [358] referred to. When Mr. Porter asked me if I had received the letter, he referred to this letter.

Whereupon, the attorney for the plaintiff offered in evidence and read into the record, the letter referred to, which was marked "Plaintiff's Exhibit Mc-Kittrick No. N," and reads as follows:

William McKittrick, Hotel Potter, Santa Barbara, Cal. Dear Sir:—I have advised Mr. Scribner that on your return to San Francisco, which will be next week sometime, you will either call upon him, or communicate with him and arrange a meeting, at which the conflicting titles of the Elk Hills properties may be discussed. Mr. Scribner will negotiate with you along the lines we have discussed and agree to keep one string of tools running on each section so long as oil is discovered in paying quantities, a well producing 100 barrels per day being considered a paying

well. We will do this drilling so that each quarter of each section will be developed in turn and paid for. The contest, as I understand, comes up for hearing on August 8th, and if trade is to be made so that you are to proceed to get patent without contest, any contract entered into between us should be executed within the next ten days. Please advise Mr. Scribner when you expect to be in San Francisco and he will arrange to be here at that time to meet you. I hope you and he will be able to come to some agreement. Yours respectfully, W. S. Porter.

The witness continuing, testified as follows:

Mr. Porter wanted us to pay \$200 an acre for the land in controversy in that contest, and for all the land held by us under all the locations. I did not accept that proposition; I would not consider it.

I have no idea how much land is worth in money value. [359] All I know is that there are immense quantities of Fuller's earth there, and I know that they have discovered oil there since then.

In answer to the question as to whether I have an idea that the land was worth more than we were offered, I will say that there was a matter of principle involved—whether you would allow a man to hold you up and rob you, take your property away from you, and name his price. That was one thing. I don't believe I would consider any value or consideration that the Associated Oil Company might offer me, as an inducement to sell that property.

Mr. Owen said in the conversation in Bakersfield

that there were thousands of tons of Fuller's earth exposed in those sections, and that he considered it the best quality of Fuller's earth in the United States. He said that he had many tests of it himself. In fact he showed me a test of Fuller's earth at that time.

In answer to the question as to whether Mr. Owen had made a thorough examination of the property covered by our locations, I will say that he told me that he had been there many months. In fact, he had been there many years—four or five years for that matter.

CROSS EXAMINATION OF W. H. MCKITTRICK.

I am not interested in the oil business and never have been.

I first went into the Elk Hills many years ago. There used to be a band of elk there, and I used to go over the hill looking for them. I was first there, I would say, in 1900.

I was then ranching. My ranch is about sixteen or seventeen miles from there.

I think I have been right on the Elk Hills but once up until 1907. I never made any examination of the ground for its mineral possibilities prior to 1907, and prior to that year [360] I had not had any experience in Fullers earth. I relied entirely on Mr. Packard, who was running a Fullers earth mill.

And I first met Josiah Owen in 1909 at Eagle Pass, Texas. I had no conversation with him then with reference to any portion of the Elk Hills. The first conversation of that kind I had with him was, I think, in 1907.

When I talked with Mr. Owen in 1903, he said that he was not at liberty at that time to tell me what he would put me on to. He said that he would put me on to something good after awhile, but was not at liberty to state what it was, and it was not until four years later that he came near me with reference to it. I had then forgotten all about it until he looked me up in Bakersfield. He then said that he had been many months out on the Elk Hills, and that that was the proposition he wanted me to take up when we had the conversation on the boat, and he was not at liberty to make any statement at that time because he was working for the Southern Pacific Railroad, and that since that time he had made arrangements with the Southern Pacific Railroad that he and Dumble could take up what land the Company didn't want, and do as they wanted to with it. But he didn't want his name mentioned at that time in 1907. He told me not to mention his name.

Mr. Owen was a gentleman, and I always had the highest regard for him as a truthful man. He did not say anything then about using Mr. Dumble's name.

I did not at that time express any surprise or ask any questions as to why Mr. Owen's name was not to be used. I had the utmost confidence in him, and asked no questions. His request was that I should not say anything about his having anything to do with the taking up of this land in the Elk Hills. He told me that he had known about this land for some time and kept it quiet. My understanding was that he knew

about the land all the time but that he was not at liberty to take other people in until he had made this arrangement with the [361] Southern Pacific Company; he was in their employ; and he said, I believe, that it was not an honorable thing to do as long as he was in the employ of people, to make any deals on the outside. I don't remember that he said that he had kept quiet about what he knew about the Fuller's earth. I didn't understand that he had not made this discovery of his known to anybody prior to the time he told me. He did not tell me of anyone to whom he had reported it, and I did not ascertain that he had reported it to anyone prior to the time he told me about it.

I only met him three or four times after that; just met him on the street and said "How do you do." He told me that he knew in 1903 there were large quantities—thousands of tons of Fuller's earth in the Elk Hills. He told me that there might be a possibility of oil there, but that oil could not be found within less than 3400 feet, but he could not tell whether it was in paying quantities or not, but that he believed that oil was there at that depth.

I was confining myself to Fuller's earth, and didn't consider the oil at all. It might have been the understanding at that time that that depth was prohibitive, but I am not up on the oil business. I never paid any attention to it. I can't say that it was my understanding at that time that that depth was prohibitive. Mr. Owen didn't say anything to me about the depth being prohibitive. He said that he had been out there so

many months, and that he didn't think there was any chance of oil in less than 3400 feet, that there might be oil at that depth. He suggested the locations for Fuller's earth, and did not say that it was for the purpose of getting the oil. My purpose was Fuller's earth, and Fuller's earth only, and not for oil. Of course I knew that if oil was ever discovered, that was something that would be all right,—it might come in all right later, or after we got some of our Fuller's earth off; but I didn't consider at that time [362] the possibilities of oil as a portion of the value of our location. We located purely for Fuller's earth. My ideas were based on what Mr. Owen and Mr. Packard told me.

The locations were made in 1909. The lands were located by others in 1907, and we could not locate then. I think the prior locations lapsed and were abandoned; we did not buy them out.

We located several sections with the idea of giving us plenty of time to develop these bodies of Fuller's earth, and then we would abandon the others. To the best of my recollection, we located 20, 22, 24, the north half of 26, and the south half of 28, in 30-23. There was another half section in 30-24—a part of a section, or a section, I don't know which. I think we are still holding the portion I have just mentioned. I am certain that we located other lands than the sections I have mentioned, and have given them up. I couldn't tell what the other sections were. It may be a fact that we have given up portions of the sec-

tions I have mentioned. I think we developed Fuller's earth on all the sections I have mentioned; I can not be positive. We haven't sold any of the Fuller's earth. At times we were not able to go on the land; we were kept off. We have not received patent, and I am aware of the fact that many mines are worked and large proceeds derived from them without patent having been obtained. I don't know that anyone has prevented us from hauling Fuller's earth to market. We have not marketed it—only took it off to make tests.

I am interested in the property but it was entirely in the hands of Mr. Munzer. I believe the Associated Oil Company is trying to rob us.

In our contest we contended for the land as containing Fuller's earth, not as containing oil. I don't know that I contended that it does not contain oil. The statement from [363] Mr. Owen was that it possibly did. I don't think the question of the lands containing oil was raised by our men in the contest. I didn't hear any testimony as to that.

Our locations were on even numbered sections, and I cannot say that prior to January 1, 1905, I knew of any deposits of Fuller's earth on any odd numbered sections in township 30-23, and I cannot say that anyone else knew of such deposits on the odd numbered sections in that township prior to that time, and I cannot now say that there is Fuller's earth on any of the odd numbered sections in that township in paying quantities. To the best of my knowledge

there are paying quantities on the even numbered sections. I have seen earth that is pronounced Fuller's earth, and believe it to be Fuller's earth, in paying quantities. I have the opinion of experts to that effect. I was so informed by Mr. Jewell, who was a Special Agent for the Interior Department at one time, and is now engaged in the oil business in Bakersfield as a consulting geologist. He was also an expert on fences and enclosures. I received the opinion of the experts in 1907.

We made no attempt to locate the lands in 1907. They were already located then by others. I don't know what work was done on the locations; that was left entirely to Mr. Packard. I don't remember how much money I paid on the locations; I paid my part. I believe there was something like nine or ten sections located. I cannot tell how much was expended altogether on the locations.

There was no injunction from removing Fuller's earth from those locations that I know of.

Mr. Owen told me in 1907, that E. T. Dumble was his partner in any enterprise that he had.

RE-DIRECT EXAMINATION OF W. H. McKITTRICK.

One of our men reported to Mr. Munzer that they had been driven off our land by the Associated Oil Company armed [364] guards. That did not prevent us from developing the land for Fuller's earth since then. We took counsel, and were told to go right on with our assessment work every time we

could get in there, and simply do nothing but our assessment work.

I have been in the ranching business since 1890. My ranch is located at Kern River Delta below Bakersfield; embraces about 2300 acres, of which about eighteen or nineteen hundred acres are under cultivation. In my opinion, the Elk Hills are absolutely worthless for agricultural purposes. I don't think a sheep man would pay taxes on it even as a grazing proposition. I never saw a drop of water all through them. The surface is so eroded that nothing could be done in the way of agriculture, even if they had water. I did not own it for grazing purposes. I could not pay the taxes on it because they only have grass on it maybe twice in four or five years. It is a little short—grass called poverty grass, that grows there. Cattle could not go in there.

RE-CROSS EXAMINATION OF W. H. MCKITTRICK.

I say that for grazing purposes the Elk Hills were absolutely worthless. I would not own it; I would not want to rent it. I used the word "absolutely" in order to emphasize its worthless character for grazing. When I was there in January or February there was no vegitation growing on the Elk Hills, and no grass that I would call grass at all. I saw no signs of sheep having been there. In the early spring you might get a few weeds, but as far as grass is concerned, there was nothing there. There may be some there now. There was none there when I was there—

not enough for grazing purposes, over the country I went over. [365]

RE-DIRECT EXAMINATION OF W. H. MCKITTRICK.

I have been ranching for twenty-five years. Have grazed cattle but not sheep. There is some water down in the flat in 30-23. Mr. Miller controls it all, I understand.

W. E. YOULE, a witness called and sworn on behalf of the Plaintiff, testified as follows:

DIRECT EXAMINATION OF W. E. YOULE.

I am 65 years old and reside in Los Angeles. For the past thirty years I have been engaged in the oil business. I first went into the oil business in Venango County, Pennsylvania, in 1863. From 1863 until 1875, I followed the new fields—new developments rather—of Pennsylvania from Pit Hole, Oil City, Parker's Landing—that is down towards Pittsburgh—all along the river and creek there, Oil Creek and the Allegheny River. I was engaged in the examination of new fields all my life.

I was in the Pennsylvania fields from 1863 until 1875 except three years after 1866 I was in the Canadian fields at a place called Patrolea in Ontario. Those fields were undeveloped at that time.

Before leaving Pennsylvania in 1866, I was in charge of the United States Oil Co. there and two members of the company, two directors, were interested in lands in Canada that they thought had indi-

cations of oil. I had been rather lucky for those people in the Pennsylvania fields and they wanted me to go to Canada.

The Canadian fields proved to be good oil territory; they got lots of oil there; they are producing oil there yet.

From Canada, I went back to Pennsylvania, still in the [366] oil business. At the request of a man named Kern, I joined the firm, took charge of it, contracting and drilling new territory.

Later I was employed by Mr. Sifton, a member of parliament of Canada, and Mr. Glass, then Mayor of London, Canada, away up in Manitoba, on some oil land that had indications but had not been developed. I was there a short time and did not attempt to develop the land because of inability to tell anything about it.

After I left Canada at that time I went to Salt Lake and examined, to a limited extent, the banks of the lake for gilsonite and asphaltum. I didn't like the looks of it. At that time I was not familiar with asphaltum base oil. I thought the stuff was too heavy to pump. They had nothing of the kind in the East. They had paraffine there generally.

From Salt Lake I went to San Francisco where I knew the secretary of the company I had once managed, was a member of the firm of F. B. Taylor & Co., handling oil of every kind. The same gentleman is now Vice-President of the Standard Oil Co., Mr. Schofield. He was interested in oil operations in California and told me they were attempting to get

an oil well down in Newhall, Los Angeles County, and would like to have me go down there and see it. I went down. I think I went down alone. I came to Los Angeles first. And, while making the enquiry, during that time, I met W. W. Childs, brother of O. W. Childs, and he told me that R. C. McPherson, an oil man, was here in the city and operating in Newhall. Mr. Childs kept a store on Los Angeles Street at that time, a tin and sheet-iron store, and was making oil well pipe, riveted pipe, for Mr. McPherson; and sometime during the day, later, I met Mr. McPherson. I arranged with Mr. McPherson to go out to the well and take charge of it and fish out a lot of casing and tools that were broken off in the hole. [367]

That field was not developed at that time. It was later developed and one of the nice fields of the country. It was never very big, but very prolific, that is lasting. I made an examination of that territory. The examination I made had largely to do with its subsequent development.

While I was at work in that field, the San Francisco office wired me to go up into Santa Clara County, California, near Los Gatos, and make an examination, it being reported that there were indications of oil there. I went up and made the examination and drilled 8 or 9 wells. They were producing wells and were the first developed there. There was no question but that the development of that field was due to my examination and the conclusions I reached from my personal observation. That field did not last long. It

is producing, I think, a little oil yet—did for twenty years—but it was always light.

From Santa Clara County I went back to Newhall. Mr. Felton said—"I am not making any success down there. I would like to have you go down."

I will never forget the circumstances there. He was to buy me a new suit of clothes for every flowing well I would locate and strike; and I had about a dozen there in Newhall.

Subsequent to my operations in Newhall, I made other investigations of oil fields in this State. I think I left Newhall in about 1885 because it had been determined that diamond drills were to be used and I thought that would be the last thing that I would want to see.

I then made investigations of an undeveloped field in Fullerton way with the result that I agreed to put my own rig, machinery and efforts and everything in there and just go ahead and develop. That was 25 years ago. After getting 4 wells to going, I sold out. That proved to be a good field.

I then went to Mexico and examined oil territory and [368] made an adverse report on it.

I then went to New Mexico for the purpose of examining lands alleged to be of oil in character. They didn't look good to me although there are oil springs cropping. I understand that very recently, 2 or 3 small wells were put in there.

I think I then went to Bakersfield, California. There had been some development there. About 1877 an old driller who had worked for me went to McKittrick and drilled a well for an oil company. That was away back underneath the out-cropping underlying everything that lifted up. Evidently the party who located the well could not have noticed the conditions there at all. I first went there with Henry F. Williams, an employee of the Pacific Improvement Company, or agent for them. That was in 1890. He came out to Sunset, where I was getting ready to drill. I had been in Sunset before that, in 1889 first. I went into that field before there was any development.

I made an examination from the vicinity of Sunset North as far as McKittrick along at that time. It looked very favorable for oil. In fact, to be very accurate, I examined the river field, Kern River field, first in 1889 and found it very confusing, that is, the formation showed so much erosion that it was hard to arrive at any intelligent opinion about it. Of course, there were earmarks enough and evidence enough, and all that, but it was hard to get at the correct idea of it in my mind.

Mr. H. A. Blodgett employed me to make the examination in the river field, Sunset. I made the examination and found the conditions easier to determine, due to the exposed edges of the formation. As evidence of oil, there were outcroppings—springs of oil and outcroppings, the long lines of the formation that were not faulted, was a good indication that if oil was found it would be very extensive. The fact that it dipped into the valley towards the river showed something new to me; it looked to me to be the biggest

thing I ever saw in my life. The dip [369] of the valley would naturally make you think it would run horizontal, except in the Buena Vista Hills there was an uplift. You could see that plain.

There was seepages along the line of contact with the Temblor Range there around Sunset. They were in a great many places all along. What I call seepages are not all live oil, but positive evidence of oil-soaked sands and shale—some dried up, and some had made hard asphalt. The evidence there was very plain from—I don't remember the section, but it was from 3 to 5 miles along there. At that time they seemed to impress me very much.

Money was invested there on my opinion; there was a great deal of money invested. Our first efforts there were not very profitable, but determined good sand and direction, and had oil, and sold oil and made asphalt. But oil went down to 10 or 15 cents a barrel, and you could not pump water for market for that—much less drill for it.

Subsequent to that time, I made further examination of the field to the North, Northwest. Before I went very far in the Sunset, I think we were getting a rig ready, Mr. Blodgett for whom I was working—I was interested with them—had an interest in it. The conditions around McKittrick were about the same as Sunset. Indications of oil right along, and some very heavy deposits—appeared to be heavy deposits of asphalt; but upon close examination, I did not think it was asphalt very much of it, painted earth stained with oil.

Henry F. Williams wanted my report or opinion on the country for the purpose of giving it to the P. I. Co. I made a report and gave it to him. Without any question, it was very fine looking territory to me. I so stated in my report and was then asked to go to San Francisco and did so where I met F. S. Dowtey, Secretary of the P. I. Company, I think, and Ed Hays, Assistant Secretary. I think I met A. N. Towne. He was [370] manager or superintendent or something. He was with the railroad people. I do not know whether it was with the Southern Pacific R. R. Company or the Southern Pacific Company. That would be hard for me. They were the officials of either the P. I. Company or the Southern Pacific Company or the Southern Pacific R. R. I could not say which. I do not remember exactly what conversation there was at that time with reference to the field. I remember the substance of what I said. I was very much in favor of the field; and had reason to feel very sanguine that it would make good terrtiory. I do not know what their purpose was in having me go up there. I stated my conclusions to the people I have mentioned. That was before the railroad was built. I do not know whether my opinion had anything to do with the building of the branch road from Bakersfield to McKittrick. I made some statement as to where it would be profitable for the railroad company to build in there. They asked me what I thought of the territory, I know that. I cannot remember the exact words, but I was up there for two days and I told them what I thought of the territory and I knew I thought it promised to be very good territory. Nothing was discussed with me at all in regard to the proposition of building a branch road from Bakersfield to McKittrick. That road was commenced very soon after that.

After that time they were operating a lot of kettles digging up asphalt in different places around McKittrick and melting it and refining it. They had been doing it for about a year before the railroad was built. That was a sort of preliminary to get the value of that deposit. But it proved that those deposits did not go down very deep and before long they were out of asphalt—that is, the pure stuff. During that time it was managed by a man named Hutton.

The P. I. Company wanted me to go over and look at it. [371] They said things were not going right over there. I was at that time operating at Sunset. This was after the railroad was built. I went over there and found quite a number of men, 50 I suppose, working there. I made an examination of the situation and made a report that I thought it would be a good idea to find some asphalt before they attempted very much more. The railroad had become discouraged at that time. I scattered the men out in the hills; and in digging the holes we found on Section 34—I forget now the township and range, but, at any rate, about a mile and a half, I guess, from the old terminal point of the railroad, and from the

old works, a heavy vein of asphalt. It was about ten feet thick. We didn't know, of course, the extent of it at the time we struck it, but just on top it was about ten feet wide, dipping down about thirty degrees. It was very shallow; about 30% purity. I reported to both Jewett and Blodgett and the P. I. Company.

After that discovery, they seemed to want me to take care of the proposition. I agreed to do it but cannot remember just how we divided it up between Jewett and Blodgett and the Asphalt Company there, but I had to look after both places, about thirty miles apart.

About this time C. P. Huntintgon, A. N. Towne, Hatsfield, son-in-law of Huntington, Henry F. Williams, Mr. Burkhalter, I think it was—I am not sure of Mr. Burkhalter, but one of the superintendents—came to Asphalto in a private train of cars, two private cars, I think. I had forewarning of their coming by telegram from San Francisco. I sent down to Henry Miller's and got a four-seated surrey, four nice mules; took the party out; and I had a team myself. C. P. Huntington said he preferred to go with me rather than ride behind the mules. So we made quite a little trip all around through the country.

I do not know what they were doing there. They came [372] out to see me, so they said. They came out to look over the country. I could not say as an oil business. They might have come out there to go

over the branch road. I could not say what their business was. They went out with me and examined the property. We went out quite a way. I suppose we drove 10 or 12 miles or further than that. About all I talked to Huntington was about my conclusions about the territory around McKittrick as an oil proposition. I remember very distinctly that he impressed me very much as being a man that drove into details a good deal. The discussion about the possibilities of the country with me were always as to oil. I never paid any attention to asphalt. I knew that asphalt was only the result of evaporation on the surface and that the fountain head that supplied that asphalt must be below there. I remember saying to Mr. Huntington that I thought their stock would be worth more money if they had 100 years fuel down there.

I do not remember that we went towards the Buena Vista hills to the south-east. I know the valley called the Elkhorn Valley which lies between Buena Vista hills and the Elk Hills. We went down in the south-east along that valley. We went to a section there called Section 36, that had some little sharp hills in there that showed the formation very plain. I think we drove around the turn of the railroad there. There was more asphalt indications there. I had 30 or 40 men digging holes around that country and quite a number of holes showed asphalt. With us oil men, we didn't care anything about the asphalt; did not cut any figure with us at all; but it

was evidence, just the same. But we knew without that asphalt; we didn't need that; but to those who didn't know that, we would show the evidence of asphalt that was contained in these holes around. Little streaks of asphalt anywhere, most, in there, for a radius of several miles. The asphalt was evidence of the [373] existence of oil deposits, oil sands. There must have been something to furnish that evidence, and that was below.

The Elkhorn Valley lies between the Elk Hills and the Buena Vista Hills. I cannot say whether the section I have mentioned was in the Elk Hills or the Buena Vista Hills. I think we went on the west side of Elk Hills. I remember describing the synclinal in there, and believe that those hills were the uplift of the hills on the other side of there, the other formation. In other words, it was dipping towards those hills and there must be a return dip. They could not always dip one way, that was the Elk hills.

I had formed that conclusion before the visit of Mr. Huntington and his associates. I formed it when I first saw it. I could not say that I expressed that opinion in any way to Mr. Huntington or any of his associates. I expressed my opinion just as I thought it and believed it; but I do not remember just what I did say to him. I merely know that I told him that I believed in that country, and gave him my reasons just as I state now. In a general way, I explained the thing to him that I believed that that country was

not a shoe-string at all, but it was a great big field, from the evidence. The formation did not dip into the hills, where it could be faulted and broken up here and there, but dipped into the valley where it might be a very profitable field, provided you could reach it. You cannot tell, of course, what the depth was.

These uplifts can be seen when driving down towards the lake; but if I remember the line of that trip we made, we went down to the turn of the railroad, and I had built a kind of road over there for the purpose of getting water over the hills toward Lokern, toward the Elk hills.

Just prior to that visit, I had some men digging out the pits and holes I have mentioned. They came out when we had [374] struck this vein of asphalt. I remember distinctly that one of the P. I. people said to me "if your report is not favorable, this branch comes out to Buttonwillow"—that they would abandon the branch as far as Buttonwillow.

I think we had holes dug in the Elk hills. I am pretty positive we did. There was no asphalt in the Elk hills that I could see.

There are oil sands in the Elk Hills. I saw them at the time I was in there. I think it was in 1898. I was there two or three days. I instructed Mr. McMurdo, or somebody, to go in there and set stakes and we would locate that country—mineral locations. Those locations were made as the result of my opinion from a personal observation of the Elk hills.

It seems that at that time we were a sort of bureau of information there. There was no one else there to go to. While I don't suppose I knew very much about it in comparison with some people now-a-days, at that time they all came to me, and I suggested, without inspecting it, that it would be well to locate it, and I believe I was one of the locators. I did not make the locations myself.

That country was a blanket. It was not like the Ventura field which dips down 60 degrees where if you throw a stone out there and drill there, you will get a dry hole. The uplift in the Elk hills indicated that you might get oil at 1000 feet, or might get it at 2000 or 3000 feet, but it was shallower there than it would be in the syncline.

I made a chloroform and fire test of the oil sands I found in the Elk hills. The results showed bituminous matter—gases. The Elk hills was full of gas. It was burned with gas all over. It was evidence of a very volatile oil and evidence of an oil that might not have much asphalt base. It was very familiar to me, for I had seen parallels of the same [375] kind of formation. I saw it over in Fullerton. There were a number of places where gas could be found along the hills. I cannot say it was generally distributed through them. I know it was in two or three places.

I didn't show any of the Huntington party the indications in the Elk Hills. I did not go that far.

Relative to a comparison as to the characteristics of the formation of the Elk hills and that along the

line of contact of the Temblor Range at Sunset northwest as far as McKittrick, I will say, why, the Elk Hills, always, to me- There was an intuitiveness there that I always felt like getting away from the broken conditions I found on the edge of the formation. And the Elk Hills looked good to me all right. But that is as far as you could give any geology on it. It looked good from every standpoint; but there was no evidence of any uplift before you reached the Elk Hills; therefore the same formation that existed and was cropping out on the McKittrick side, if it was an uplifting at the Elk Hills, must be uniform, must be the same; and, as long as that didn't uplift and expose itself and spill over and make asphalt was evidence that you would get bigger, more prolific wells than you could where the asphalt was, because of the fact that it was not broken. The biggest wells in the world are where there is the least asphalt.

And as to the comparative value between the Elk Hills and the territory right around McKittrick as an oil territory, I would say that I would regard the Elk Hills as one of the best locations, without a question. I formed that impression or opinion immediately and reported it to Jewett, Blodgett, Farnum and the people who were locators with me.

I became acquainted with the Southern Pacific R. R. or the Southern Pacific Co. people about 1880 for the purposes of drilling. I had to do with them at Del Monte. They had [376] spent about \$50,000.00 in

trying to get a well down, and Senator Felton told them that if they would get me, probably they would get a hole down. So I went over to the office and met Mr. Charles Crocker. I took a flat contract of \$10,000.00 or no money if I did not get a well, and I got it. It was subsequent to that time that I went over to the McKittrick or Sunset field with Henry F. Williams.

Q. During your whole experience as an oil man, Mr. Youle, have any sums of money been invested upon your recommendations on the possibilities of oil in new fields?

A. It is pretty hard to tell how much that would be. I have drilled one hundred and seventy-six wells, and they would average \$20,000 apiece. That would be a whole lot of money.

Q. Do you know whether or not the officials you have named as coming out—Mr. Huntington, Mr. Towne, Mr. Dowtey and others,—on the occasion you have mentioned, had any confidence in your judgment as a practical geologist?

A. "Practical geologist" is rather the right term. Oh, I should imagine so. I had been successful. I had been very successful at Newhall, and, as I say, I had more clothes than I could wear there, in many years, upon a flowing well, and I located every one of the wells. I just had my own way. But I guess it was luck, you know. I really don't think a man could see under the ground very far. I wish I could.

Q. Have you had any reason to change your opin-

ion of the Elk Hills as an oil territory since the time you first formed it?

A. No sir. I have no information which would change my opinion. [377]

CROSS EXAMINATION OF W. E. YOULE.

I first became interested in the oil business in Pennsylvania shortly after the beginning of the oil business in this country—I don't think over a couple of years. I worked in the first refinery that was built in the world, called Thum's Refinery, as a boy.

In Pennsylvania in those days we did not have such things as gas blow-outs. We had indications there similar to what has been termed "oil sand indications" in the vicinity of McKittrick. We attached no importance whatever to them. They were merely evidences that the early prospectors started on. Subsequent to that, we got away from that. That was up the Allegheny River where the formations lifted up and cropped out. The Indians used to gather that oil in small quantities and sell it as Seneca Oil at a dollar a bottle. The early prospectors commenced drilling up there, but well after well kept walking down the river and kept getting deeper and deeper, and the deeper the wells the bigger and more prolific they were.

The experience in Pennsylvania would not help in California. The formation in Pennsylvania was entirely different. There was no return dip. The oil sand indications in Pennsylvania have this significance, that it taught men to be very cautious, careful. That is all.

In Virginia, you have the very identical thing—I was there, I forgot to mention. Right there they have got the same thing as here, identically the anticlines and the synclines and the uplifts and the croppings and the seepage of oil just the same as in Virginia.

I never saw an oil sand in Pennsylvania on the surface, although they were up the river, I never went up there.

[378] a good indication of finding oil in paying quantities. I will make the statement broad. You show me an oil seepage with a proper development and I will show you an oil field; and if you can find any instance it is not so, it is something I don't know of. From my experience in the California field, I will say that such an oil sand indication is always an indication of the presence of oil in paying quantities. I make that statement unqualifiedly and I know of no exception to it whatever.

My first experience in California was at Newhall for a short time. Prior to that time, I had no experience in Utah. I was there and made an examination of some territory. I discovered indications of Gilsonite and nothing else. I cannot tell what direction it was from Salt Lake City. I think it was on an Indian Reservation. I saw indications of sticky asphaltum oil in other places. I didn't think much of it because it was too far from market, seaboard. If you

had the whole Salt Lake full of oil, I would not take it as a gift. I didn't give the indications there much thought for the reason that at that time I was early from Pennsylvania and I was not very much posted on these Pacific Coast formations. I was not qualified to give a very good opinion at that time on the formations on this coast, for I didn't know the uplifts, and faults, and things that existed there as well as I did later.

I was not very much impressed with the prospects for oil in the vicinity of Salt Lake. In the first place, I didn't know the asphaltic oils at all, and I thought it was too thick and I thought it would be impossible to market such oil. No man could tell until developed as to the existence of oil in any quantity.

I was at Newhall I suppose for 4 or 5 years. About 12 successful wells were drilled there under my direction. I do not think there was a dry hole there. They appeared to be [379] successful from a commercial standpoint. The company was successful. They sold them for over a million dollars after they had produced many years, to the Standard Oil Company. That territory was not developed and drilled altogether under my direction and as the result of my advice. Subsequent to my first arrival in Newhall, there were others drilling there. They may have advised the company, for all I know. I didn't furnish the capital for the drilling there. Others acted upon my advice and as a result, they developed wells which were commercially successful.

After that, I went to Los Gatos to what is called Moody Gulch, near Los Gatos, where I found a spring, oil leaking out of the shale. I made a report, got a rig ready, and went in there and drilled and found oil. I do not remember how many wells I drilled, 8 or 9. I doubt whether that was commercially successful territory. It was beautiful oil, worth four or five dollars a barrel; and it was just inviting enough to drill another well and then another, hoping to get a bigger one, which often happens; and our experience as oil men shows that where you get a little well, you can get a big one somewhere near, and we were after the big well, but we didn't get it. We got a hundredbarrel well while I was there at I judge about 1500 feet. That was not commercially profitable. They spent a couple of hundred thousand dollars in there.

I next went back to Newhall and then into Mexico

and New Mexico.

I was in Puente and drilled about 7 or 8 wells. I must have been there 2 or 3 years where I struck oil. There is a wonderful thing there. I will never forget it. All the money the Puente people gave me was \$8,000.00, and I built a pipe line and put in all those wells, and the plants and everything, paid up all the debts; and all I had was \$8,000.00 to do it, and [380] I did it out of the production. The first well was a producer and the second one was bigger. That is something I will never forget. Those wells that I had charge of at Puente were sunk under my advice and direction and as a result of my examinations of the surface.

I made an unfavorable report of my examinations in New Mexico because of the horizontal condition of the formation there and erosions on all sides of it. If there was any oil in there, it must have run out, a great deal of it; and I so reported. I understand that recently they have gone in there and possibly found the sand below the formation I have mentioned that is producing oil now.

I next went to Kern County. There was no oil field there then. Mr. Blodgett asked me to come up and I went to Bakersfield. I think I first went out on Kern River, about 3 or 4 miles from Bakersfield, and looked at a little outcropping that was across the river, and think I reported to Mr. Blodgett that I would rather see the Sunset field before I made my report. I then went to Sunset, this was in 1889. was there about 2 days the first time. I reported to Mr. Blodgett that I was very much impressed with the Sunset croppings and formation and believed that there was a heavy oil certainly existing in there. As a result of my advice, the development work was begun under my control and was not successful. They got into trouble, and a year later they got me to go there and get them out of trouble, and I stayed there for eleven years. I think their lack of success at first was largely due to trouble in the mechanical end of the work.

When I went there in 1890, we started two drilling rigs. We found oil in every one of the first three wells. They were drilled on Section 28 at Sunset. I

560

think there were probably 50 wells sunk there under my direction or advice. That was [381] not a commercially successful territory. Blodgett, Beale, the Company, wanted me to drill those shallow wells to get a thick heavy oil which they called liquid maltha, and let the light oil alone. They wanted this heavy oil. They were in the asphalt business and the shallow wells were drilled near the outcrop. I told them that we could go out farther and get more oil. They wanted the liquid maltha for the purpose of flexing hard asphalt. I would have given anything in the world to have been allowed to go down further and drill a well where I ought to. I knew where I ought to go, but they would not allow it. The shallow wells were profitable at the time with asphalt at \$30 a ton, but subsequently it went down to \$10 a ton and that of course made a difference. After asphalt went down, wells began to be sunk further away from the outcrop and got lighter oils. Since that time, some of the territory has been very profitable. Some of the wells for lighter oil were sunk under my direction and proved successful. I drilled on Section 35 four or five wells that would do anything from 75 to 100 barrels. I drilled the Monarch Oil Co.'s wells, one or two. I drilled the Occidental. The Argoyle. I must have drilled 10 or 15 wells in that light oil. That was a very light oil that could be shipped in tanks and piped. And I drilled the Pittsburgh, that is as light oil as they have in that field with a gravity of 19 or 20. I didn't have charge of wells for other people besides Jewett and Blodgett. Myself and different employees were helping everybody out. And it was really forced upon me to drill all the other wells. I drilled for nearly all of the people in there. And I always advised people to get out and get in there.

The first wells sunk by Jewett and Blodgett were close to the outcrop, not exactly on it.

I ceased to have active operations in the oil field about 2 years ago. I left the Sunset fields in 1901. At the [382] time I left there, the wells had gotten out from the outcrop at Sunset approximately a mile.

After I left Sunset, I went to Colusa County and drilled 2 or 3 wells there by contract. They were not successful and were not started on my advice. They were started before I went there. F. M. Smith had expended a lot of money there on the advice of a party who told him to drill for oil and he wanted a well drilled there and I was recommended and went to him and made a contract. I drilled wells 1700 feet deep. It was not sunk as the result of my original investigations.

I first went to McKittrick in 1890 with Henry F. Williams. Jewett and Blodgett then had some man working there mining asphalt and melting it in kettles. Later on, I made a discovery of a large asphalt deposit about a year after the road was built in there, I think in 1890. I do not remember the direction of that deposit from McKittrick. The asphalt was in the McKittrick Hills.

When I examined the formation in the vicinity of McKittrick, I found it very confusing, broken up, and the asphalt deposits were to my mind an indication or proof of a leak. All formations that lift up to the surface may be very uniform and unfaulted for miles. They would still crop out, you would still have your evidence; but where there is a cross section of faults, then it is bad. I found little cross sections of faults towards the Santa Maria Springs, but rather northwest of McKittrick. I do not remember how far.

I examined what is now called the Buena Vista hills several times during that period. At that time, I dindn't necessarily come to the conclusion that the Elkhorn Valley lying between the Buena Vista hills and the Elk hills was a syncline, for I hadn't determined the fact of the uplift in the other hills. But after subsequent examination of both Buena Vista hills [383] and the Elk hills, I made up my mind there was a syncline between the Elk hills and McKittrick. I didn't find an anticline in the Elk hills.

I was familiar with the country immediately surrounding McKittrick for about 11 years. I was over it all the time. Every few weeks there would be a trip to some place until the depression of oil. Then I quit the examination. We had more territory than we knew what to do with.

I had charge of the Union Oil Company lease in the vicinity of McKittrick which was leased for oil and asphaltum, but we knew that we could not produce oil to ship at a dollar a barrel and make any money, but we could take the oil and asphalt out of it and get \$30 a ton and make money. During that entire time,

I didn't have charge of the development of oil wells there. But I, at several times, advised the development of oil in between the Elk hills and McKittrick. I do not remember the number of the township. I told them I thought we would get the biggest kind of a well over there if we would just sink it down on Section 36.

I didn't at that time come to the conclusion as to the depth we would have to sink. That would be out of the question. I never heard such a question asked before. It would be far from an experienced man's ideas to think of such a thing. There is a gamble in the oil business and we are willing to go just as long as the string will let us or the money will let us, and often go very deep; and I do not believe that I ever heard an expert oil man or a geologist ask the question before what he thought of depth, because it is so utterly foolish to think that man could tell anything at all about the depth. It is not impossible to tell the depth. You might see you were in an oil zone, and you would be very unsafe to say that you could not get it within a reasonable depth. I thought we could get it within a reasonable [384] depth on Section 36. I didn't think anything about how deep we would have to go. I felt just as we did at Puente. My man gave it up and said—"Well, we will give this up," and I said-"Well, we still have got some string left on the spool and we will go down." And we got it. Now the depth with an oil man never cuts any figure until he can't go any deeper. And he cannot tell. I

would not to-day, myself, on a new field. It looked to me to come inside of reach or I would not have advised it. I believed we could reach it within 3,000 feet. I thought it could be reached sooner than that. I don't think it was ever reached.

Geologists, scientific geologists—Le Conte—taught in some school that there was no oil in California, and gave a good reason for it. I know that you can get all the advice you want from geologists and from Bulletins that this is so and that is so, but you cannot prove it until you put the drill on, and the drill has shown exactly what practical geology is. The drill has shown that it is very unsafe to say that there is not anything over there in those hills today at a reasonable depth.

As a result of my long experience and operation and practical work in the field, I have not come to the conclusion that the opinions and theories of scientific geologists are entirely reliable. I have come to this conclusion that a lot of Bulletins that were written in those days, without the history of drilling that has happened since then, have proven that the geology of that date was not the geology of to-day. Geologists in those days, like Le Conte, made predictions that were not true; but geologists since then have found out their mistake and don't do it. I say, a geologist will say all those hills towards the Elk Hills and that whole country "There is good oil territory," but as to the depth, I don't see how they can tell. They endeavor to tell, but the drill is the proof of it.

As a practical geologist, I would say that scientific conjectures with reference [385] to the depth of formations have to give way to the actual test of the drill. Under some circumstances, the depth of a formation at a particular point can be determined. Suppose there is an anticlinal exposed, and sand is exposed, pitching 45 degrees and one is at the exposure; he can measure back 45 degrees and at a thousand feet he will go a thousand feet to get it. A geologist finds that out; he measures it; he can tell. But I say that a man-for instance, here is a formation pitching 45 degrees, and bye and bye, the drill shows it is not 45 but 30, and bye and bye the drill shows it is only 15can geology tell that? Yet it is so. Therefore. wouldn't it be dangerous to condemn the Elk Hills on the question of geology? That is the test of the drill. The drill might show that we had started out at an angle of 15 degrees, that later on increased to 20, to 30, or to 45. The geologist might be a bad geologist. Le Conte was one of them.

I have not had occasion to examine the United States Geological Survey Bulletin No. 406 entitled "Preliminary Report on the McKittrick-Sunset oil region," by Ralph Arnold and Harry R. Johnson.

I think the statement on page 210 of this Bulletin: "Assuming the thickness of the McKittrick formation to be about the same in the hills as it is in the Midway and McKittrick Districts, that is, between 1500 and 2000 feet, it seems probable that at the axis of the Elk Hills anticline, the oil-bearing zone is from

566

900 to 1400 feet below the surface,"—is pretty safe. They saw the anticline, I didn't. They should be able to tell.

It cannot be safe to assume that a formation at some other point of a particular thickness will continue the same thickness until it has been tested with the drill. Here is an instance. The Union Oil Co. drilled a well out here 2000 feet deep, and condemned a great big territory. Mr. Doheny, who didn't know anything about the business at all except as mining, concluded [386] that he found a fault. He went the other side of the fault, within a stone's throw of this well. and the result was that he got a great big well, sold the product to the Santa Fe, and afterwards sold out to the Santa Fe and made a great deal of money. Those things happen. I would not care, if I had an idea that the formation was there and that ear-marks were there, whether the Associated Oil Co. went down 4000 feet or whether they went down three feet and a half-that would not cut any figure whatever. They might get a water well. Water streaks go through any formation. That is why the oil business is a gamble. It is because there is no man, geologist, expert or anything else, who can tell you where these faults are. There may be a world of oil there; there may be a tight streak of sand filled up with clay that won't let the oil through, and you might drill right into that spot. You cannot look down and see; you may be in the wrong place. But by reason of being unfortunate and getting in the wrong place, that don't test the territory. It takes several wells to test the territory. That well of 3000 or 4000 feet would not cut any figure with me at all. The proper test of a territory is more than one well.

Well, I would hate to put my money up on a fellow that was not a practical oil man. He is a great deal safer, and his judgment better, than the fellow who has not had any experience. They have got to know where there is not any oil, anyhow—that is, in this way, you want to know the bad places to keep from. Here is property—there is nothing there until you drill a well.

Q. That is, until you have drilled the well, it is merely a gamble, as you have expressed it?

A. It is a gamble as to quantity.

Q. Isn't it a gamble as to the existence of oil?

A. No.

Q. Never ? [387]

A. I don't think so. I have never, in an experience of fifty years, drilled a well that I didn't get some oil sand, where I thought it existed before I started the well, in California. Back of east of course you could not tell, but in California you have got a chance to see. You can go in on the edge of your formation and form an opinion; you can follow that out. Now, I have been pretty lucky—maybe luckier than a good many—but for others, in the employ of other people, mostly, in my life; and my experience is it is unsafe to say, "No; there is not any oil over there," because it might be there and the evidence is there that

there is. The evidence was there anywhere—Elk Hills and Buena Vista Hills is the fold and uplift; I didn't see any anticline there. I was there several times. It might be there. Those geologists examine things pretty thoroughly, and they have found it if it is there, and possibly I didn't see it.

- Q. Now, what was the direction of the axis of that fold that you found in the Elk Hills?
 - A. Oh, an uplift, folded-just simply rolling over.
 - Q. What was the axis-what direction?
- A. Dipping towards the river, the Kern River, and then towards the McKittrick field, just folded—just as if it was dipping away from McKittrick, like that, and then come up here, and folded, and go down again.
 - Q. How great a fold? At what angle?
- A. Oh, I couldn't tell. I didn't examine it carefully enough for that—the angle of it; but it was folded.
- Q. Did you make any determination as to the probable depth of the overlying formation, covering the oil formation?

One of the hardest things ever asked of an oil man is to determine the probable depth of an overlying formation covering the oil formation. Intuitively I know an apple is an apple; [388] and I could not analyze it, but I know it when I see it. There are lots of things that you can see but could not explain; you know it though just the same. Take a man 50 years in the business and he looks at a thing. Without

doubt, it is the hardest thing in the world to prove facts without the drill. The opinion is there. My opinion was that that was a prolific oil field, and if I had had my way, I would have drilled there in preference to over at the McKittrick side.

I did not at any time make any determination as to the probable thickness of the overlying formation covering the oil formation in the Elk Hills, and in advising with reference to that territory, I never made any statement to the persons who made locations there as to the probable depth they would have to sink their wells. I am sure that I did not say anything to them about it being deep territory. I told them to get a rig that would go deep. I believe I got a rig ready for it but didn't use it. We had the rig over on 34 and I told them that we could get that rig over there, but I suggested that we had better get water over there first to furnish the boiler. I don't know what happened. Something delayed it and then came the low price of oil and they said they didn't have any money and they didn't pay much attention to it. I was getting ready to get out of there myself. didn't pay much attention to the Elk Hills in a particular way.

My attention was chiefly directed to the vicinity of McKittrick, and a great portion of the time in locating a lot of land in there, looking over it with the idea of locating it for mineral locations. That was within a radius of 3 or 4 miles of McKittrick.

I crossed down into what is called the McKittrick

Range toward Midway and Sunset many times and am very familiar with most of it. On the line of outcrop along that line from McKittrick [389] to Sunset one side of the formation is in and out. The preponderance of evidence there is that it is along the whole length from Temblor to Sunset and to the San Emedio Mountains. The formation lying West and South-west of the outcrop toward the Temblor Range changes in there. It is mostly shale, and a little behind that, overlaying it, is sand rock. No oil sand, sandstone.

As you go further into the hills I made one or two tests in there on what is called the south side of the anticline, and we went through a little shale about 300 feet, and we got out of the shale and struck a soft sand rock, and we got wells that flowed water. That was on the South dip looking West on the strike. The formation lying to the West was the oldest.

We made some determination from the indications or sections of the ground as to the thickness of the overlying formation from McKittrick toward Midway. But those opinions on measuring the outcrops or rather, forming opinions on the measuring of the outcrops, we found to be by experience very misleading. Sand is plastic and thins out in the outcrop. In going over it, it pinches and thins out. The sand stretches over that fold and that is the reason for the fault—it is thinner. In other words, these formations were horizontal and fell down by the shrinkage—not an upheaval. They fell down and broke the

weak parts; and we know from experience and not from theory that those outcrops were thinner than those deeper in the formation. My practical experience in the field leads me to believe that this was probably due to a subsidence and not to an upheaval.

As to the Elk Hills, there was evidence of an upheaval or fold. Naturally, that formation didn't spill over there and show a lot of asphalt, and therefore it looked to me better than the McKittrick side because it was intact and the oil was there, in my estimation, because it had not wasted. I had no reason to believe that it could get away from there. There was nothing to [390] show that it could, and it must be there, because it hadn't got away. On the edge above, it was quite small—from the pitch of the formation, I judge it would be too deep in the valley to reach it.

Out in front of the Sunset was the Buena Vista Hills and I always told them that I believed more in the Buena Vista Hills and the Elk Hills than I did on the edges of the Sunset and McKittrick, from experience in those fields, and that is why I formed that opinion.

I believed that in the valley it was very deep to the oil formation.

I was unable anywhere to find a section of stratification or formation from which I could determine in my own mind the probable thickness of the overlying formation; but what looked good to me was, there was no evidence that it got away—that it was cut out. 572

In my opinion, the upheaval in the Elk Hills was probably caused by the shrinkage of the earth. As the formation is getting older and cooling off, it goes down here and turns up at any place and folds along. I believe that is accepted by a great many men that are well posted in formations to be a very good theory and, perhaps, correct. As to what I mean by referring to the Elk Hills as being a fold, I will say that on the McKittrick side of the formation it is dipping at an angle of about 30 degrees, but the valley is nearly level. Now that was new to nearly everyone to find a formation dipping out into the valley. But I concluded that that formation must, to a certain extent, conform to the shape of the valley, or else the valley could not have been there. It would have been uplifted hills like all of that country is if it was not that way; but the depth is hard to determine, because there was no way of determining it without drilling a hole. But at the Elk Hills you could see it lifting [391] up, with no evidence of faulty conditions like a running away of millions of tons of asphalt. That was why I thought it would be a good place to drill a well, because of that uplift. That is the difference between an anticline and an uplift. That is folded without breaking it. The anticline is broken into and goes this way and that. The distinction I desire to make between a fold and an anticline is that the anticline is a broken fold according to my way of determining it.

My opinion is that there was but one fold in the Elk Hills.

The Elk Hills country showed to me to be an uplift.

No well was started in any portion of the Elk Hills during my time there.

When I started the men out to prospect for asphaltum, I didn't tell them what particular territory to go into. I know two of them were working in the Elk Hills. I saw indications of asphaltum there on the West side down near the railroad. Aside from those, I saw no indications of asphaltum there. I have never seen indications that appeared gray on the surface and dark beneath it.

I saw oil sand pretty near the summit of the Elk Hills. I do not remember the section.

I have a good feeling for the railroad people and everybody else, and I am here an unwilling witness, and I don't want to make any mistake, and I give the testimony as I saw it. I didn't post myself in any way and don't remember all the directions there or the contours.

The oil sand I saw was on top. It seemed to be a blow-out of volcanic matter—not volcanic matter, but as if it was a chimney. It was on the ridge.

I am familiar with the Miller & Lux Headquarters Ranch. I have been there and drove into the Elk Hills from the ranch. [392] I should judge the blowout was about a mile and a half from the ranch, West I think.

It was not the blow-out from which I made certain tests. I got samples in many places. I was there 2 or 3 days and I was there to examine and made examinations of that country for at least 2 miles in extent—all different places. The samples I took at two different times on two different days and perhaps three. The territory from which I took the samples covered a mile, anyway, if not longer, about parallel with the strike of the country. I think I got some of the samples in a gulch. I got some on the hills. I found no asphaltum, but I found a sand that was percolated so much that you could put it on a fire shovel and heat it a little and it would blaze. And in making the chloroform test, you could get particles of oil.

You could get oil from the territory I examined on those occasions. At the present time, I am not able to give the exact measurements of the territory where I got the samples or the exact sections.

I was there and authorized the location of the lands after an examination. I didn't make the locations myself. I walked over the ground and made a map and had information about it and directed the men where to make the locations and build the monuments. That was in 1898 or 99 as I remember. The locations were undoubtedly made with reference to section corners.

I found through the Elk Hills many evidences of gas. That was shown by the peculiar look of the formation that has been attacked by gas. I don't know as I can describe it. It is a grayish color and has a glassy appearance, and manifests itself everywhere where gas is escaping. My first impression

when I saw this place was that there was evidence of gas there. One or two places we put a can over it and let it accumulate, and then lit it. That was over near the apex that I spoke of that had a [393] hole in it. They and the oil sands were all there together. And as far as an oil sand is concerned, it cannot be said that we found an oil sand-any sand is oil sand that has got oil in it, and any sand can have oil in it if the oil attacks the sand or percolates It is not necessary that that was an oil sand. That sand might be any sand that is attacked by oil that comes through the crevices. There was nothing to indicate that that sand contained an oil reservoir. It might have been. The gas escaping there would be evidence of this: that the gas would come-it was not washed-I can tell a washed gas by the smell of it. It didn't come through water, and it was evident that it was pretty near the home where it belonged. The occurrence of gas would be an indication of oil. didn't think it necessary to make a test to determine what kind of gas that was. It was not marsh gas. I can tell the difference between marsh and all other kinds of gas without a test. I could tell it in the night with my eyes shut. The evidence of gas is an evidence or indication as to the character of the formation; if it it corroborated by the contacts. It has no significance as to the uniformity of formation; it is sometimes evidence of disturbed formation, a broken or faulted formation. I have sometimes found that to be a fact in California oil fields.

RE-DIRECT EXAMINATION OF W. E. YOULE.

I know the Standard Asphalt Company. I was it's Manager and may have held some stock and been an officer in the company. I don't remember that. F. S. Douty, Secretary and Treasurer of the Pacific Improvement Company, and Edward Hayes, his assistant, were also officers in the Standard Asphalt Company. I think Douty was it's President and Hayes it's Secretary.

The affairs of the Standard Asphalt Company were undoubtedly controlled by the Pacific Improvement Company. They [394] furnished me with passes and I made a weekly report to the P. I. Co. at San Francisco. I think when the Standard Asphalt Company started out, it and the Southern Pacific R. R. Co. had offices at 4th and Townsend in San Francisco.

Money was spent on the location made on my recommendation in the Elk Hills; they built roads and did assessment work. They intended to go in there and I got a rig ready to send over, and some way they fell down. They said money was getting scarce and oil was cheaper and transportation hard to get.

There was no evidence of any disturbed formation in the Elk Hills. There was very little disturbance there that I saw.

From my observation and examination in those hills, I would not have advised that they be sold for their agricultural value, and the majority of geologists would not have so advised. I most assuredly would have advised my employer to acquire the lands at a price in excess of their agricultural value because of their oil possibilities. The lands had no value other than for the purpose of drilling for oil.

As to whether an ordinarily prudent man would be justified in the expenditure of money for developing those lands, including the lands in controversy here, with reasonable expectation of developing a paying oil property, I would say that I would have advised any company to furnish the money to the extent of \$50,000.00 or \$100,000.00 to develop that country.

RE-CROSS EXAMINATION OF W. E. YOULE.

It would be hard to say how deep a well could have gone in the Elk Hills for \$50,000.00. I have taken flat contracts with the P. I. Co. and Borax Smith for a good deal less money. It cost me \$7,000.00 to go about 2,000 feet for the P. I. Co. I drilled a well in Santa Maria 3,000 feet that cost \$4,200.00 about [395] 3 years ago. I had had no experience in that field to the extent of \$50,000.00 in one hole. I could drill 3,500 or 4,000 feet for \$50,000.00 or less.

I did not contemplate having to go that far. The oil business is a gamble. It is not like farming. You just bet that you don't go down that deep and that territory was good to have bet on. If you win once in four or five times, you make a lot of money. That is the reason why I would have advised people to spend \$50,000.00 or \$100,000.00 there. I wouldn't advise

widows and orphans and dishwashers and cooks who could not risk money; but if you wanted a chance to make a million dollars, I would pick the Elk Hills quicker than any piece of land in there, because the formation justifies what I say. The reason that I say it takes more than one well to determine the character of a country is that experience has taught me and others that we might drill a well in a faulty place, as I have described, and not get anything, and changing the rig around fifty feet, probably get a well at 800 feet when you didn't get it in the other at 1500 feet, and didn't get anything. It takes more than one hole. I know a man that had sixteen dry holes and made a million dollars after that. He got oil in the same country. He crept out and got it.

The fact that oil is found on one section is not evidence that it may be found in every section in the township; there may be kidneys. Oil is not contained like a river under ground, but in kidneys. While you are in the oil sand all the time, we know by experience that there are dry holes drilled in oil sand. Had those been drilled, the first one, two or three, you might condemn the territory and throw it out, the same as the Associated did. It might have been possible to make a well for the purpose of getting the land cheap. I have had fellows do it on me, who owned the ground, and get the sand and wouldn't [396] tell about it and you had a dry hole.

The discovery of oil in one section or quarter section does not indicate to a practical oil man that oil will be discovered in every section in that township. It implies this,—if you get oil in this section, experience has taught us that oil is not just in that little space in that well, but that it has a direction somewhere. And immediately you will find oil men locating and acquiring lands quite a distance from that well. You find that among oil men because experience has taught that there is a direction to that oil vein. That is why I advised the location of several sections. There was an uplift and fold and nothing to indicate that the oil had gotten away. It was not because of any wells but because of the surface indications alone.

There were no oil wells at McKittrick at that time. I think the first well came in in 1902.

In forming my opinion as to the Elk Hills, I don't think I thought about the indications of asphalt at McKittrick. My whole opinion and my whole thoughts were upon the possibilities of the Elk Hills as an oil field. I was an oil man; not an asphalt man; and I believed that the asphalt evidence was evidence of a great big field of oil in that country.

The McKittrick side was dipping towards the Elk Hills and the asphalt at the McKittrick side had faulted and broken; but on the Elk Hill side it was not broken so much but folded up, and I made up my mind that there was a fountain head of oil for all this alike. [397]

CHARLES W. LAMONT, a witness called and sworn on behalf of the Plaintiff, testified as follows:

DIRECT EXAMINATION.

I am 52 years old and reside in National City, San

Diego County, California. My occupation has been mining and prospecting since the fall of 1879.

I went over into the Elk Hills in the fall of 1899 with my partner, Si Drouillard, who was an old prospector. He was pretty familiar with that country, had been there a long time.

I know what they call the Temblor Range.

When I went to the Elk Hills with Drouillard, we discovered a blow-out of what we considered brea at that time, an indication of oil, and found a gas blow-out and shale, brown, black, blue, white, and found gypsum and Fullers Earth and a few other conglomerations in there, almost due South and a little West of Miller & Lux Headquarters Ranch. The largest indication in the bunch we found was on what afterwards proved to be Section 32, Township 30, Range 24. Tom Baker, Jeff Packard and Drouillard were associated with me then.

We picked some of the shale and sand where the blow-out was in Section 32. It was decomposed shale and there was strata of oil sand there, and the shale was very hot. There had been a rain before then, a week or so, and while the weather was cool and the day was rather cool, that formation, after we got under the surface, was very hot. In fact, it was too hot to handle pleasantly. The indications of oil there was just the oil sand and that shale that we know goes with an oil formation.

On the North and along the line of contact from McKittrick towards Sunset right close to the lake, we saw live oil coming out of the ground, floating on the mud and water, towards the Easterly and Northerly end of the Elk Hills. [398]

After seeing these indications of oil, I located seven sections of land right in what I took to be the anticline along there, and then I formed another company and located several more sections. I don't remember how many. The first seven sections located were located Westerly from Section 32, the original discovery, and extended over to Township 30, Range 23.

Besides the first bunch of associates, my associates were Jewett and Blodgett and other members of the Kern Co. Bank—N. C. Farnum, Bert Packard, Roper and several more. I do not remember all of them.

I concluded that Section 32, where the oil sand was, was the top of the anticline. I have seen indications of oil in Section 14, 30-22, where the railroad goes through, but I never examined it closely. It looked like oil sand and brea. It would be what I took to be the West end of the anticline at that time.

I certainly regarded the Elk Hills country at that time as good oil territory and the only conclusion I have come to since then is that it was better than I thought it was in the first place. I have never had any reason to think otherwise, on account of the development of gas which I didn't think existed in such quantities in that formation.

I know John Jean. I took him out there as a sort of agent for some of the citizens of Bakersfield to report on the ground, and in consideration thereof he was to have a claim, and he agreed to keep the find quiet because it was not generally known that there was oil in there.

The work we did in support of our locations was principally surveying and road building. We ran some cuts into the bank of the gulch that was there and dug a hole. We made different roads—if I remember right, it was about 5 or 6 miles of the main road and then little branch roads as we needed to go around in different places. If I remember right, we started building the [399] roads early in 1900 and contined for 5 or 6 years and kept up the locations continuously most of the time—not entirely during the years 1903-1904. Some of the rest of the company went out and made locations, but if I remember right, I think the last time I was out there was in 1903. We then held two sections of the ground.

I have been over most of the Elk Hills in 30-24 and 30-23. I don't think it is available for agriculture. Never found any water there. Sometimes in an extra good year, there is a little grass on the South slope, but in other years, there is nothing. I don't think there is any value there except for oil, gypsum and Fullers Earth. I offered to rent our ground at one time for \$10 a section to a skeep man, and he wouldn't give it unless we would agree to put water there.

CROSS-EXAMINATION OF CHARLES W. LAMONT.

I first made locations in the Elk Hills the beginning of November, 1899. The first location was on Section 32, Township 30, Range 24. I located that because in my judgment there was the best indications of oil. I located it for oil and gypsum. I couldn't tell how much gypsum was there. I never tried to develop that no more than to dig into it. Never tried to market it. I didn't try to find out whether I could market it or not. I was not interested in that part of it. I was interested in the oil and located it for oil. Gypsum was included in the notice. It was located for oil along with the other minerals that the ground contained. I would have located part of it for gypsum but not as much as we did locate.

I discovered oil sand at the blow-out I have mentioned. Aside from that, I made no discovery of oil on any of the claims that we located during the period I held them. I never marketed one cent's worth of material, Fullers Earth, gypsum, clay or any- [400] thing else from those locations. Held about two sections for ten years. I didn't do any assessment work on them. This was not because I did not consider them worth sufficient attention. I was broke.

REDIRECT EXAMINATION OF CHARLES W. LAMONT.

There was an oil depression from 1901 lasting for several years, and it was just as good as insulting anybody to ask them to put their money into it at that time. That was the whole reason for our failure to try to influence people there or get money to carry out the locations.

RECROSS EXAMINATION OF CHARLES W. LAMONT.

The depression in the price of oil was the cause of the failure to get people interested in our locations, and at that time gypsum was so plentiful around there that it wouldn't pay to put it on the market from that piece of ground unless we could develop the country and put roads in there. Up to that time, we hadn't put roads into the gypsum beds. We didn't develop them so that we could ride down to them in a wagon because we didn't want to use the gypsum beds at that time. We were saving them for the time when we could get them out of there. We didn't develop the ground for either gypsum or Fullers Earth and the depression in the price of oil prevented us from developing it for oil.

JOHN R. SCUPHAM, a witness called and sworn on behalf of the Plaintiff, testified as follows:

DIRECT EXAMINATION

I reside in Oakland, California. I was employed by the [401] Central Pacific Railroad Company, the Southern Pacific Railroad Company, the Southern Pacific Company, the Western Development Company, and the Pacific Improvement Company. I was a civil Engineer at that time.

I was employed by the Central Pacific Railroad Company in the fall of 1865 and was employed as assistant engineer on the Central and Southern Pacific Railroad Companies and served in that capacity for 8 or 9 years in the usual affairs of an assistant engineer—surveying, calculating quantities and directing the construction of work and the like.

About the year 1874, I was recalled from the field work and had my office in the Engineering Department, and was used as a sort of consulting engineer by the directors of all the companies, and from that on I served them in that capacity, reporting to the board of directors who requested me to make an examination or a report.

The directors of the several companies were Leland Stanford, Charles Crocker, Mark Hopkins, C. P. Huntington, afterwards D. D. Colton, Judge F. B. Crocker and Col. C. F. Crocker. I think A. N. Towne was afterwards a director.

Mr. Towne was the General Manager of the Central and Southern Pacific Railroad Companies.

As consulting engineer, I came into contact with the directors frequently in examining various subjects that they wished me to report on. I examined mineral lands in which these companies or these directors on behalf of these companies were interested. I examined and reported on the Carbon Hill coal mines in the State of Washington, afterwards purchased by the company; I examined and reported on the Green River coal mines and the small outcrops of lignite coal in California in Santiago Canyon purchased by Mr. Crocker afterwards; and at Hatchett Creek, Shasta County, and in Arizona and Texas, at Eagle Pass—I had work done [402] there. I had lines run into some coal fields in Northern Sonora

that I thought was of some importance, and in many other places. When I say that I had a line run in, I mean survey run in.

I had the company, with the encouragement of Governor Stanford, convert their principal stations into meteorological stations. I supplied them with rain gauges and thermometers and wind gauges and got up a system of reports which, I believe, has been maintained up to the present time.

I made a report to Governor Stanford on the artesian water prospects in the San Joaquin Valley—especially the southern portion of it reaching into Kern Valley—and had a well sunk at a point about two miles south of Delano station, and at something over 400 feet got a splendid artesian well, which was the first artesian well in that valley. The well was south of Visalia and north of Bakersfield.

I have been in the engineering business continually since that time and that included the examination of lands for their mineral value.

I had a conversation with Mr. A. N. Towne, General Manager of the Southern Pacific Railroad Company, in 1887, in which he asked me if I thought the asphalt deposits west of Bakersfield would justify the building of a road in there; and after some general conversation about it, I told him that I had not seen that particular portion of the strike where the asphalt cropped out and manifested itself, and he said: "I think you should go and see that on your way south, and when you come back, come in and report to me."

I went to Asphalto and saw all the asphaltum outeroppings and deposits in that vicinity and I saw where they had been extracting asphaltum in trenches and pits, and saw the motion of the flow, and made various experiments with it. I went to the southwest into the pass between the hills and examined the country lying to the southwest. I was convinced in my own mind as soon [403] as I saw the escarpments there that it was oil land and that we would find seepages and manifestations of oil in those hills to the southeast. We drove down between the Buena Vista Hill on the east and what is now called the Elk Hills about 7 miles into a sort of gulch or arroyo in township 31-23, and went 2 or 3 miles into the hills into township 30-23, about two and a half miles in that township. I then travelled to the south from that point coming to the head of another arroyo. next day we went about 4 miles further to the southeast and walked over the hills. I think we got into what is now section 32 where I found the best oil seepage that I had seen yet, although I had found it in these other arroyos, but that was the best manifestation of all. The sandstone at the southwest edge of these hills dipped decidedly to the southeast, showing that we had passed an anticline or the presence of an anticline. We found the oil seep in township 30-24, I think, by estimating the distance that we had gone to the southeast.

I examined the ground I had passed over as carefully as I could and noticed shales and the occasional exposure of sandstone, and was studying carefully to

find asphaltum outcroppings—brea, as we called it then. I thought the land was underlaid with oil.

On my return to San Francisco, I described to Mr. Towne what I had found there at Asphalto in the outcrop of asphaltum, and the sources of the asphaltum. When I had finished a description, I told him that I thought these hills lying to the east were overlaying the oil measures, and that they would turn out to be very important in their future development. I refer to what is now called the Elk Hills.

While I was discussing the matter with Mr. Towne, I think he had sent for Col. C. F. Crocker. Crocker came in and Towne, looking up, said: "Scupham thinks those hills south of Miller & Lux ranch are overlaying an oil deposit," or words to [404] that effect. Mr. Crocker said: "Well, it is a good thing that there is some value of that kind in that land. Otherwise, it would be a very poor asset for the company." He was standing up while that was being said; and when we were discussing it, he came and sat down—the three of us together, and he asked me why I thought that, and I went into the details explaining why, and discussed the matter with him pretty thoroughly.

I thought at that time that the Elk Hills were valuable lands, but the lands lying to the west and north were of much less importance. I stated that to Towne and Crocker, perhaps, without any explanation.

I was acquainted at that time with Jerome Madden

who was land agent for the Southern Pacific Railway Company, and when I left Mr. Towne, I went into Madden's office and found that the land in this township (30-23) was not all surveyed. About two-thirds of it, the southeast two-thirds was unsurveyed.

I told Madden that I thought that was going to be valuable land, and that it was overlaying an oil deposit, and that they ought to have the survey completed there so the land could be selected. My recollection is that he consented that that was the thing to be done. I had no authority to direct Mr. Madden to do anything. It was merely a suggestion on my part. Steps were taken at that time, or shortly after, to have the land surveyed. I had the conversations I have spoken of with Mr. Towne and Mr. Crocker with reference to the lands known as the Elk Hills in 1887.

CROSS EXAMINATION OF JOHN R. SCUPHAM

In my talk with Mr. Madden, I found that the territory I visited in the Elk Hills had not been surveyed. On my second trip to the Elk Hills, I went into what I calculated from the direction and distance we had traveled, to be 32, Township 30-24. That [405] section was not marked. The outline of the township had been surveyed on the west and south, but it had not been sectionized. I don't know exactly when it was surveyed. It had been surveyed by 1893. The portion of the township we were in had not been surveyed when we were in there.

In the conversation with Madden in 1887, I told him that I thought 30-23 should be surveyed because of its oil possibilities.

I think an application was made for a patent to that land in 1893, but I am not perfectly sure of the time.

I observe from Government's exhibit "E", a certified copy of the township plat of 30-23, now called to my attention, that the township was not surveyed until 1901. I didn't have it in my mind that way. It was not made as a whole until 1901. The east boundary at sections 24, 25 and 36 were surveyed in 1893.

It appears that Mr. Madden didn't immediately proceed to adopt my suggestion so far as obtaining results are concerned.

I was not later called upon by Mr. Towne, nor any of the officials of any of the railroad companies, to make a further investigation of this territory. I did not prepare a written report of the trip I have referred to. I made the report verbally. I had a talk with Mr. Towne immediately after I had had the conversation with Mr. Madden. Madden was not present during my conversation with Towne.

I did not go so much into detail in my conversation with Mr. Madden as I did with Mr. Towne. I told Mr. Madden that I thought this territory was going to be very important for oil on further development, that I had seen seepages in what would be covered by this Section 30-23. I had seen them at the head

of the arroyo and at one or two other points. It was just faint manifestations of oil in 30-23, I think.

I was gone five days on the occasion of that trip and was two days in the hills. I was with William Corral who is [406] dead now. The oil sand was at the head of a little arroyo. It was at the bottom where the stream would run in wet weather, about 12 feet above the bed of the canyon, as I recollect it, may be. There was a little stain on the other side. The oil sand dipped toward the Southeast and the strike was Southeast and Northwest.

Where we first saw the sandstone, the dip was to the East. We were going up the dip. It was nearly flat, but it rose a little in the direction we were going, North and East. On the other side of the canyon, the stain dipped towards the East and South. I had a general impression that the strike was to the Northwest. It was covered with surface material so that it was not clear on the lefthand side. I could not determine the dip at that point. It was covered with debris from the ridge. I think the dip was the same on both sides. I assumed it was. I went some distance beyond the hill, but didn't see where it came out. It pitched under the surface and was getting deeper. It might have been in section 32-30-24. It was revealed at several points, rising up on the hillside towards the Southeast.

I severed my formal connection with these companies in 1885, but I was still consulted by them—by the directors—after that in different operations until within 2 or 3 years after that time, before 1890; and since that time I have been engaged in private practice entirely.

I was consulting engineer for the directors of the Southern Pacific Company. I cannot state the year that company began operating lines in California. It was some two or three years before the time I retired from active service as assistant engineer. Prior to that time I had acted as assistant engineer for the Central Pacific Railway Company on its lines as far as Ogden, and in the surveys beyond Ogden, and I also acted as engineer for the Southern Pacific [407] Railroad Company on its lines in the southern part of California and Arizona and New Mexico.

In 1883, the Southern Pacific Company took over these properties under a lease and operated the same, and at that time, the active operations were mainly carried on by the officers of the Southern Pacific Company. They were still directors in the other lines and still directing their affairs.

Mr. A. N. Towne began his career as General Manager of the Central Pacific Railroad Company. It was not my affair to get the exact status of those gentlemen. I was reporting to them.

After the Southern Pacific Company took over the properties, Mr. Towne was Manager of the Central Pacific line between Sacramento and Ogden. I don't know that he was paid entirely by the Southern Pacific Company. I don't pretend to know who was paying him. I don't know anything to the contrary.

The same was true with reference to the lines belonging to the Southern Pacific Railroad Company which had been taken over by the Southern Pacific Company under leases. Mr. Town retired from active work in 1895, maybe. I think maybe he died in 1896. He was in poor health for a number of years before he died, and the active management and control was in other hands during that time. He lived in San Francisco and was in Palo Alto on account of the climate for short intervals.

At the time I had the conversation heretofore mentioned, in 1887, with Jerome Madden, he was land agent of the Southern Pacific Railroad Company, and Mr. Mills was land agent of the Central Pacific Railroad Company at that time. Those two offices were entirely distinct. Mr. Madden continued to be land agent of the Southern Pacific Railroad Company for about twelve years after that time and was succeeded by Charles W. Eberlein about 1889 or 1890.

My entire report of the trip I have mentioned was made [408] in that conversation with Towne and Crocker, and I did not write any letters embodying any portion of that report and, so far as I know, it was not kept in any way that was at all permanent.

I was sent in that country to examine into the asphaltum situation. That was what took me there first. I was informed that some effort was being made to have the railroad constructed in there on account of the asphaltum production. There was no discussion at that time as to the development of oil

in that vicinity on the part of the officials of the company or by Mr. Towne; but he had in mind the asphaltum and that is what he called my attention to, to see if it was worth while extending a branch for the business that might be developed. He was inclined to be skeptical. In my report in that conversation, I went into details as to the quantity and quality—resources and asphalt—I was impressed with the great resources of asphalt at Asphalto in the vicinity of what is now known as McKittrick. I was not impressed with the possibility of the Elk Hills for asphaltum. I reported quite fully in that conversation with Mr. Towne with reference to the asphaltum and its possibilities for railway tonnage. There was a discussion at that time with reference to the development of oil, but not for its development for fuel for the railroad. I mentioned my conviction that the shales and sandstones in those hills were overlaying an oil formation and that there was not any doubt of it in my mind. Mr. Towne had been constantly in the habit of suppressing me, thinking I was too enthusiastic as to resources, and he took that stand in that conversation. He said: "Well, couldn't all these things be that you are describing and nothing underlying it?" I explained that the old formation would contain a certain amount of hydro-carbon, and if it was pierced at the right place and in the right way, it was sure to bring it to the surface. Well, we discussed it as men who were defending an idea, and the impression was very strong in my mind at that time. He was inclined to be sceptical.

I have no doubt but what Mr. Crocker and Mr. Towne were [409] convinced that it was an oil formation. It was Mr. Towne that suggested the matter of my looking up the survey in Madden's office. I think I finally succeeded in convincing Mr. Towne. I got that impression.

It is likely that I made some estimate as to the depth that the oil would be in, increasing depth as we went to the southwest; but it would be struck at a very reasonable depth where I had seen the seepage—what I said then was probably that it would be 800 or 1200 feet. I reached that conclusion as the result of the two short trips in the hills.

I had seen a good many oil wells prior to that time. In the year 1875, I think, I went with McPherson into the Moody Gulch in the Santa Cruz mountains and stayed with him two or three days examining their oil wells at that point; and also at Mr. Colton's suggestion, I went to the Pico Canyon to examine into the oil wells there, their depth and the formation and everything connected with them. He was interested in oil there. He was a director in the railroad at that time. I studied the thing somewhat. I examined that ground near Oil City at Coalinga. There was practically nothing there at that time except just a supposition. I was more or less an amateur in the oil business.

After looking up the matter of the survey with Madden, I went back to Mr. Towne a day or two later and reported to him that the land had not been surveyed.

Mr. Towne did not send anybody else in there immediately after I made my report. He did within a year or two. I don't know whom he sent. I suggested that Mr. Ireland, the State Mineralogist, had Goodyear as a field assistant, and I had employed Mr. Goodyear to examine the Cow Creek coal formation with me a year or two before that and I got a very good impression of him and suggested that it might be possible to get the State Mineralogist to make some research in that section. I got the impression that that suggestion was followed in a way and think [410] Mr. Goodyear went in there. I heard that some other person had gone in. I have forgotten who now. I remember the name of Burch, but I do not know whether he was the one that went in or not. I did hear that someone had been sent in for that purpose. I did not hear that his report was adverse; I got a different impression. I did not pay any attention to it at that time.

I thought the Elk Hills of far more importance in the vicinity of McKittrick because, looking at the matter in a particular way, the formation sloped from McKittrick to the southeast, and to the northwest and west the formation was faulted and flextured very much, and it was not so likely to be productive of oil as where the formation was more uniform in its slope. My impression is, and it is very likely, that that was discussed in my conversation with Mr. Towne. I informed him that the Elk Hills were better than McKittrick and that I believed that oil could be found in that territory.

It is a question of guessing what was underneath the ground and I would repeat what I said at that time, as near as I can recollect, that where you have the oil measures, they were contained in the largethat is, in a thousand acres-any amount of hydrocarbons, it might be concentrated within one or two miles in that area or it might be disseminated through the whole extent; but there seems to be a certain relationship between the amount of hydro-carbons and the amount of superincumbent materials in these oil formations. I said to Mr. Towne and Mr. Crocker that the oil did extend under there and it probably would be very important. I thought I knew, from the manifestations which I observed on the surface. that it did extend under there in paying quantities, but I didn't know it mathematically. The surface seepage indicated most positively that there was oil in that portion in the vicinity of the seepage. It was a fresh seepage. Such indication could not be found in an exhausted oil sand. That it was an active [411] seepage was not visible to the unassisted eye, but it showed freshness of the outflow of oil. The stain was a fresh stain. I could not detect actual oil, but the stain of oil was necessarily recent. There had not been a complete evaporation of it. I don't think that could be true in a bed of oil sand that was not productive, not with all the other manifestations accompanying it. The other manifestations were the heavily bedded shale and sandstone in succession, and the tight clays and other manifestations of oil formations. I was deeply impressed with the belief that it was a formation in which you could find oil, but did not actually find the oil; I found the presence of it.

I next returned to that territory in the autumn of 1893, I think. I went entirely across the Elk Hills at that time on horseback and rode down to the point that I spoke of before which turned out to be probably in section 32 of 30-24, and afterwards went south from there and then across the shores of Buena Vista Lake, and then back again on the Elk Hills. I was there one day.

I made a report to my associates as a result of that trip. I had a section of forest land in the Forest Reserve and some gentlemen suggested that I get lieu land for it and locate it in that section of the country. I did not do that. This was a private venture, and in no way connected with the railroad company, and my associates were strangers to that company. I was not an official of the company at that time.

REDIRECT EXAMINATION OF JOHN R. SCUPHAM.

It was about two years after I had the conversation with Mr. Towne and Mr. Crocker that the railroad was built from Bakersfield to McKittrick.

In connection with the determining of the artesian zone or basin in the San Joaquin Valley which I have mentioned, I had [412] occasion to determine at that time the depth of the water, and in examining coal lands, it was a part of my work to determine the depth of the coal; making an estimate based on the slope of

the strata and the point for a workable shaft. In a broad way there is a relation between the means by which you determine the depth of artesians basins and coal measures and that of oil measures or oil sands. The stratification of a particular section would govern in each case and that is why I say they are analogous.

In examining the seepage in 32, 30-24, I found no indication of a great waste of oil there. The seepage was very distinct, but there was not any great manifestation of it. It was considerably smaller than the waste around McKittrick.

My failure to use forest lieu selection rights in that section in 1893 was not due to my disbelief in the Elk Hills as an oil property. I had confidence in my impression by my trip at that time, but other matters governed me. I had a good offer for the land and sold it to Charles Doe.

On cross-examination, I said that the dip of the Elk Hills on the apex of the anticline was south of east, and that going up it was to the northeast. I account for that in this manner. I was observing closely the slight dip of the strata as we climbed the hills, watching the compass, and I found that the strata was rising to the north and east, and when we passed the summit and got near the head of the arroyo facing the other way, going to the north and east, I found that the dip—there was some dip south of east in the strata that showed at that point; and I assumed that that was a local flexure of a strata of the line that we happened to strike at that profile.

The Mr. Crocker referred to in my statement relative to the conversation I had with Mr. A. N. Towne was Mr. C. F. Crocker, usually called Colonel Crocker to distinguish him from his father. [413] Mr. Crocker was a director and I think Vice-President of the Southern Pacific Railroad Company. It might be During my employment, Second Vice-President. Leland Stanford, Charles Crocker, F. B. Crocker, C. F. Crocker, C. P. Huntington, D. D. Colton and A. N. Towne were directors and officers of the Southern Pacific Railroad Company and the Central Pacific Railroad Company with the exception, possibly, of Mr. Towne. He was an officer, but possibly not a director at that time. They were also directors and officers of the Southern Pacific Company and they controlled the stock or had nearly all the stock of the Western Development and the Pacific Development Companies but there were some other employees acting in an official capacity in those companies.

I have bought and sold oil lands in California. Before any development whatever was made in the Elk Hills, and merely for speculation purposes, considering the ground with reference to the known oil seepages and other conspicuous evidences which I have recited in the surrounding and adjacent country of oil, and from my experiènce in the examination of oil lands, I will state that the lands in 30-23 have a high value relative to other lands.

As to the value of sections 15, 17, 21, 23, 25, 27, 29, 33 and 35 of that township, I will say the lands I have been holding in the Sunset country—relatively the

same—near an anticline and land that is not recognized by anybody as being oil land, is yet held, by those who are offering to buy, at about \$2000 per acre, and those who actually contract for it get a price as near \$1000 per acre as possible. If I were selling the lands in the sections referred to, I would want to get several hundred dollars an acre, probably \$1000 an acre.

The value is governed by other circumstances than the money value—the market value is governed by other circumstances than the real substantial value of the land. At that time, when [414] I examined these lands, the value of oil land was not well understood and it would have seemed extravagant for one to place a value of \$1000 an acre on such land, and yet it was amply worth it because it was sure to produce oil of a value equal to that on an average within two miles of the main anticline through these hills.

I did not place a value of \$1000 an acre on that land in my report to Mr. Towne and Mr. Madden. I made no estimate of its value at that time. My estimate of \$1000 an acre is based partially upon my subsequent experience in the oil field and particularly upon my experience in the Sunset field.

My experience in the Sunset field began I think in 1893 and continued until now. I am not interested in any oil property in the Sunset field at this time, but have been making an effort to get an interest in some. I have been negotiating with the owner of the property lying east of known ground in the Sunset field—land called the Bronco and some land adjament

to it. I think it is on an even numbered section.

At the time I was in this territory in the vicinity of McKittrick in 1887, I had a relatively small amount of the knowledge I subsequently acquired in the Sunset field. I am not sure that there was development spoken of in the Sunset field in 1887. There were seepages and asphaltum deposits known there. Attention was chiefly directed to the production of asphaltum at that time and I think that inducements were offered to the railroad to build into McKittrick for the purpose of developing asphaltum, and the general opinion of people who hadn't been there was that the chief value of that territory was for the value of the asphaltum. I talked with people there who were enthusiastic about oil at that time in the broken up land lying a little to the south and west of McKittrick. [415]

In 1887 there was some development for oil about a mile and a half southwest of McKittrick. a well something like 500 feet deep, regularly drilled well, with two lines of casing in it and with oil showing in the well between the casings near the surface so that you could put a stick down and bring it up dripping with oil. No oil was produced in marketable quantities at that time. I think it was then developed sufficiently to be marketed if there had been any means of sending it to market.

I think there was some oil being marketed from McKittrick in 1893. Asphaltum was being refined and oil extracted from it. The attempt to refine asphaltum began much earlier than the time I speak of. The Buena Vista refinery had been abandoned but another company took the matter up—I think it was the Standard Asphalt Company—and were refining asphalt, getting oil from it by stilling it and refining the asphalt into a compact, pure asphalt for shipment. That was after the railroad was built. The Buena Vista Company did not prove a success on account of the lack of transportation and was abandoned maybe ten years before that time. The Standard Asphalt Company did not begin to refine asphalt until after the railroad came to McKittrick, about 1890 or 1891. It continued for some years.

On my trip in 1887 I was in the vicinity of McKittrick two days. I was at several points. The trip took me five days. I did not examine any other territory than the Elk Hills. On one of the trips into the Elk Hills I found some brea. It was asphalt plus sand and sandstone. That was found south and west of 32, 30-24. It was to the north and east of a valley lying south of the Elk Hills and in the Elk Hills. There was brea in section 32, 30-24. There was the seepage and brea besides. I cannot say that that was all I saw on that trip. That is all I recollect now. I have merely the memory of seeing it here and there.

I reported to Mr. Towne generally on the asphaltum [416] situation. I reported on the asphaltum and brea indications I had found and stated that it was plainly an oil formation and that the country there indicated that it overlaid oil.

While the main purpose of my visit was to examine the extent and character of the asphalt deposits, I

went to see what there was of value and of interest to be reported on.

I reported to Mr. Towne that the brea I found at McKittrick was of excellent quality and abundant. I did not report to him that what I found in the Elk Hills was of value for commercial purposes in quantities.

Mr. Towne was interested in what I said and asked many questions concerning the possibilities of asphaltum development. That was with reference to the construction of the railroad in there. He appeared to be largely interested in what I said about the hills there being oil land. I would say that while a large part and all of our conversation was concerning asphaltum, as soon as I mentioned the fact that I believed and felt fully confident that the hills were oil lands, he took fresh interest in the matter, and I think he sent for Col. Crocker, or by accident Col. Crocker came in at that time. I am not sure which. In that statement, I specified the country now known as the Elk Hills as being valuable for oil.

I think I mentioned in that conversation that the hills lying to the west and north of McKittrick were all broken up, and that I didn't think they were good. I think I stated something to that effect and that the hills lying east were not much disturbed. I was speaking geologically. The first thing Mr. Towne said to Mr. Crocker was that "Scupham thinks those hills south of the Miller & Lux ranch is oil land." He said something signifying that. That did not refer to the Buena Vista Hills. I hadn't extended my re-

searches through them at that time. I was thinking only of the Elk Hills. I based my calculations upon a few hours [417] in the southeast portion of the Elk Hills and afterwards I had gone to the Elk Hills from the north.

I was in there part of three days in all. On my way back, I went into the edge of the hills and looked over them a little at that time. I made no other examination before making the report.

I had some conception as to the thickness of the overlying formation in the vicinity of McKittrick. I gained this from an imperfect log of a well and from my general observations. The thickness would vary with the distance from the anticline. I didn't fix a certain number of feet in determining the thickness, I only fixed it in my mind that it would be easily reached in the vicinity of the anticline. It was all within the reach of the drillers of that day, about 1500 feet.

On the first day in the Elk Hills, I saw an escarpment or faulted rock with strata visible in it and the strata pitched in different directions. That was all the stratification I saw then. On riding towards the southeast on the second day, I observed to the right, as I passed down through the valley, indications of stratification or dip. I didn't observe it closely, except this, that I saw that it varied; it pitched in different directions and was irregular and was entirely different from the dip I saw in the Elk Hills. It was different in degree. The dip of the strata on the other

side was sharp in places, but in the Elk Hills there is a very slight dip.

My conception was that that valley was over a syncline. The dip of the strata in the Elk Hills would indicate that the valley was a syncline, but the strata dipping sharply in places and changing so quickly to the west, would leave you in doubt that it had any relationship to the syncline.

On that trip in 1887 I attempted to get cross-sections at a point about seven miles southeast of Mc-Kittrick in that valley. [418] I found very imperfect sections, but such as it was, I made a sketch of it and thought it over. It was over the syncline. It included the slopes we went up and the slopes I had observed on the other side. But I cancelled them out as being too broken up to count on the general stratification of that section.

From that section, I did not determine the thickness of the overlying formation in feet. I concluded that it was within a distance that could be reached by drillers, 1500 feet or less than that I thought to the oil. I think that is about the way I had it in my mind then. I thought after making a subsequent reconnoissance over there in 1893 that it was deeper, considerably deeper, but I was still sure that the formation carried oil. I thought the thickness would go over 2000 feet. It was my opinion then that it was good oil land, but that it would cost more money to get a well through it than I was at first thinking of, when I examined the ground in 1893, I think there were locations there, but I didn't know about them

exactly. I got that from talk in camp only. I didn't see any location notices. I did not see anyone at work or any rigs or well of any kind in the hills at that time. In 1893, I crossed the hills from about their centre to the shores of Buena Vista Lake; traversed along the north Elk Hills two or three miles and then crossed them back again. On that occasion I went to the oil sand in 32-30-24. I went there at that time with reference to the possibility of taking up some land. I certainly thought it was oil territory then. I had not made any examination there between 1887 and 1893.

I first went into the Sunset about 1893 or 1894. I never became interested in that country except in a tentative way two years ago. I was not engaged in any business that would have prevented me in becoming interested there. From 1899 to 1903 or 1904, I continued to reside in California, spent my time there and elsewhere and was interested chiefly in mining enterprises. In [419] 1892 I may possibly have been interested in oil at Chittenden near Santa Cruz. I did not during that time make any oil locations anywhere. I made locations of other mining property in California and Nevada.

I had conversations with Mr. Madden in 1887, probably in 1896 and perhaps at other times, but not in relation to the lands in the Elk Hills.

It was 17 years after I made an examination in the Elk Hills before an application was made for patent by the company. They didn't seem to take my advice very seriously. I first talked about this case with a representative of the Government about twenty days ago. I talked with Mr. Mills. He was the first person to approach me with reference to giving testimony in this case. That was the first intimation I had that I might possibly give testimony. I never wrote letters to any representative of the Government nor received any letters from them.

Since I first talked to Mr. Mills, I talked briefly with Mr. Veatch. These conversations were quite casual and without making any particular impression upon my mind.

I judge that the formations in the Elk Hills were of the Neocene. I do not think I found formations belonging to other periods there. That is the formation which contains the oil.

I did not know at the time I first examined the land that there was any considerable body of oil anywhere in the vicinity of McKittrick. None had been discovered then, either there or at Midway or at Sunset in 1887. There were no wells in the Kern River field at that time, but there was oil discovered all over there. The Kern River field is about fifty miles from the Elk Hills. The nearest producing well at that time was about the same distance from the Elk Hills.

I did not keep any notes of my trip to the Elk Hills. I made some little sketches of the section from that point. I do not [420] have them now. They were lost at the time of the fire.

F. OSKAR MARTIN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am forty years of age and a mineral inspector connected with the General Land Office.

As to my training and experience, I will say that I have been engaged, both practical and theoretical, in the study of geological problems since 1894. From 1894 until 1900, I prospected and worked in the mines in Alaska, Idaho, Washington and Montana. In 1901 and 1902 I attended the George Washington University, Washington, D. C., and took a geological course there. In the summer of 1902, I took a special course in economic geology and geological mapping at Harvard University. In 1902, I passed the Civil Service examination as assistant in the Soil Survey and was appointed as such and served in the Bureau of Soils of the United States Department of Agriculture as assistant in the Soil Survey, and later as scientist, until 1905. That year I was appointed on the engineering staff of the Isthmian Canal Commission and served one year on the Panama Canal, the last six months thereof as assistant engineer in charge of the technical work of the Division of Meteorology and River Hydraulics. In 1906, I returned to the United States and until 1909 was engaged in the general engineering practice in Idaho and Montana. The early part of 1909, I took the examination for my present position to which I was appointed June first of that year and have served in that position until the present.

My preliminary education was obtained in Germany. I took the four years' scientific course in the Real Gymnasium in Saxony.

I have been engaged almost exclusively in the California oil fields since December, 1910. I have spent approximately three- [421] quarters of my time in Kern County and about one-quarter in the Coalinga District and the territory to the north thereof.

I am acquainted with the lands involved in this suit and have made several examinations of what is termed the Elk Hills from December, 1910, until February, 1912. Prior to January, 1912, I had located a few of the corners in which I was particularly interested, and during my examination in January and February of that year, I located all the section corners in the territory mentioned and nearly all the quarter corners.

I have caused to be prepared under my supervision a map of township 30-23 and adjoining lands. The map was prepared in the office of the Second Field Division of the General Land Office in San Francisco, the actual drafting being done by Mr. Kingsbury, my associate. While the greater part of the data was furnished by me, it having been derived from former field examinations made by me, some of the data was taken from Mr. Kingsbury's field examinations—that is, with reference to the townships outside of 30-23. The data pertaining to townships 30-23 and 30-24 was derived by joint examinations which Mr. Kingsbury and I made during January and February, 1912. The

data pertaining to the other townships was derived from examinations made before January, 1912, and some of it, especially referring to township 30-22, was also gained in January and February of this year and also from examinations made previously.

In explaining this map in detail, I will say that the township and section lines are taken from the official township plats on file in the United States Surveyor-General's office at San Francisco. The structure lines, as they relate to townships 30-23 and 30-24, have been put on from our personal examinations in January and February, 1912.

The structure lines in the other townships were taken from maps enclosed in Bulletin 406 of the U. S. Geological Survey [422] and have been checked by me in previous examinations and found to be correct. The full red circles on the map denote wells in which discovery of oil has been made. The open red circles denote incomplete wells-either drilling or idle. The checked red lines, the red hatched lines, in the sections of township 30-23 are lands involved in this suit. The red blotches mark oil or gas seepages. Of the base colors, the buff represents the area included in the McKittrick formation, and the green color represents the area of the formations below the McKittrick. The large letters denote the names of the different areas in the field, such as "Elk Hills", "Buena Vista Hills", "McKittrick Hills", and "Temblor Range". The black sinuous lines represent anticlines; and where those black lines are broken, they represent doubtful anticlines.

small marks with figures attached thereto mark the dips and the amount of the dips.

The map has been thoroughly checked by me in the field and I am familiar with the conditions. This map represents the condition in the field as it existed in January and February, 1912. It has been checked from the field work and is correct.

Thereupon the map referred to was offered in evidence and marked Plaintiff's Exhibit "O".

The witness, continuing, testified as follows:

As to the appearance of the Elk Hills from the surrounding country, the general contour, elevation and typical characteristics, I will say that they may be termed an anticlinorum, meaning thereby an anticlinal ridge with a major anticline and smaller wrinkles, folds, running parallel or nearly parallel to the main ridge. The elevation of the Elk Hills runs from 350 feet or thereabouts to somewhat over 1500 feet at the highest point going southward and to 1000 feet on the lowest point of the southern slope. The hills being of a comparatively recent geological age, their topography bears a close resemblance to the geological structure. [423] The dips on either side of the main ridge are low and gentle, giving it rather a broad summit and a more or less dome-like appearance.

The hills cover a territory about 18 miles long and about 6 miles wide.

Before we examined the Elk Hills, we had been to the oil seeps at McKittrick. I do not know to my personal knowledge that there had been any discovery of oil by drilling in the Elk Hills before my first examination. As the result of my examination of the land in the Elk Hills and my knowledge of the surrounding country at that time, I arrived at the conclusion that the lands there were underlaid by Petroliferous deposits at a reasonable depth when I first examined the land.

Comparatively little erosion had taken place, because, as I stated before, the hills belong to a comparatively recent geological period, and for the further reason that the climate is arid. There is evidence on the surface that the conditions in the Elk Hills are practically the same as when first uplifted, and they were practically the same in 1903 as they were in 1910.

In my opinion, the most favorable indication that the Elk Hills must be considered oil lands is the structure of the territory being of an anticlinal character. It is a well known fact that along the summits of anticlines, petroleum tends to accumulate and that the anticlinal summits are the most favorable spots for petroleum to accumulate.

I found an oil seepage in the northwest quarter of section 32, township 30 south, range 24, which confirmed my opinion which I had formerly arrived at. That gas seepage is situated near a place where the anticline has been somewhat deflected, giving the hydro-carbons a chance to exude to the surface. The existence of that seepage was plain evidence to me that the lands must be underlaid by petroliferous deposits. Further, having seen [424] and examined the oil exudations to the west, near the town of Mc-

Kittrick, I found that the formation underlying said oil seepages near McKittrick extended easterly to the Elk Hills, and that no break being visible between the formation at McKittrick going easterly to the Elk Hills was evidence to me that the formation must be the same,—that is, that the formations overlying the oil sands at McKittrick and the formations overlying the oil sands at the Elk Hills are the same.

In my examinations extending over the last 18 months or so, I have observed seepages in the Buena Vista Hills as denoted on the map. These seepages are in sections 10 and 11, township 32, range 24. The formation of the Buena Vista Hills and the Elk Hills are the same.

I have seen the seepages as denoted on this map in township 30-22 extending through sections 18, 19, 20, 29 and 28 down to the southeast corner of section 34 in the same township. After taking into consideration the development of seepages known in 1904 as shown by Barlow & Hill's maps, introduced in evidence as government's exhibit "I", and after taking into consideration the geological structure of the region, I would have advised any company employing me to hold those lands in the Elk Hills for their mineral value. I do not believe that any competent oil geologist would, in 1904 at that stage of development, have been justified in advising his employer to dispose of the lands involved in this suit for their agricultural value alone, and I certainly would have advised my employer, who was not the owner of the land in 1904, to acquire it at a price in excess of their value for agricultural purposes.

I was engaged in classifying soils and making soil surveys in North Carolina and Virginia while employed in the Bureau of soils of the United States Department of Agriculture, and I also made a soil survey in Idaho of the overflowed lands of the St. Joe [425] River for the Government in re United States vs. The Washington Water Power Company. Besides the soil survey, I have had charge of the mechanical laboratory of the Bureau of Soils in Washington, D. C. in making physical analyses of soils for approximately 3 years and made over 5000 soil analyses from all parts of the United States and its dependencies.

I have examined the soils of the lands involved in this suit. They are residual ones and may be classed in one type, terming it gravelly sand. They are very coarse, and of course on that account their drainage would be excellent; but, for the same reason, on account of their physical structure, they are not capable of retaining sufficient soil moisture to induce plant growth. Taken in connection with the slight rainfall existing in this territory, it is apparent to me that no agricultural crops can be raised on these lands.

I saw evidences on the west half of 16-30-23 of cultivation. I found that about 10 acres of the land had been ploughed or scratched over and found a stack of barley. The crop had not been a plentiful one and had not matured.

I have prepared a summary from data copied from the official reports of the United States Weather Bureau from their station at Bakersfield which gives the temperatures and precipitations for each year from 1906 to 1910, which is as follows: [426]

CLIMATOLOGICAL DATA—BAKERSFIELD

	Temperature						Rainfall						
	Annual Mean	Highest	Date	Lowest	Date	Total for Year	Greatest Monthly	Month	Least Monthly	Month			
1906	63.8	113	July 24	26	Jan. 1*	7.65	1.70	March	0	X			
1907	63.9	110	July 18						0	X			
1908	63.2	118	July 28						0	X			
	68.0	108	July 20						0	X			
1910	67.4		May 31*						0	X			

^{*} Also on other dates.

Monthly and Annual Mean Temperatures and Rainfall for 1910 with Departures from the Normal.

	Jan.	Feb.	Mar.	April	May	June	July
Temperature	47.4	50.8	62.8	69.0	74.6	78.4	86.6
Departure	-0.7	-1.6	*4.9	*4.3	*1.7	-3.5	-2.0
Rainfall		0.22			0	0	0
Departure	*0.04	-0.29	*0.27	-0.22	-0.18	-0.05	-0.02
	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	
Temperature	84.0	77.0	69.7	60.6	48.4	67	.4
Departure	-0.7	*1.2	*3.7	*4.7	*0.2	*1.0	
Rainfall	0	0		1.37			
					-0.26	*0.	

X Several months.

I would say from the evidence existing in 1904 that I knew that there was petroleum or natural gas in the Elk Hills. I have had experience in quartz mining. A man does not know that he has a paying mine when he finds a gold-bearing ledge on the surface. I would say that the chances to develop oil in the Elk Hills are greater than the chances to develop a paying gold or silver mine from the outcrop usually existing on quartz property.

From the evidence existing in 1904, an ordinarily prudent man would have been justified in the expenditure of money in the Elk Hills with a reasonable expectation of ultimately developing a paying oil property.

CROSS-EXAMINATION OF F. OSKAR MARTIN.

From the indications I saw in 1910 and 1911, I would say that the chances to get oil in the Elk Hills in 1904 would be considerably greater than the chances to develop a paying gold mine or silver mine from the ordinary evidences of outcrops connected with gold and silver. In estimating the relative chances, I cannot state it in percentages.

My experience as to the actual prospecting and development of oil is what I have learned during my work in the oil fields. I have not been engaged in oil development myself; have never drilled any wells or been engaged in the practical drilling of wells. I consider myself an oil expert along geological lines from my studies. I have never had anything to do

with the sinking or operation of an oil well that was productice. An oil geologist determines the places where practical men should work and I deem myself qualified to determine such places. My determinations have come out pretty well in certain instances. I have not determined such places for the practical man, but practical men have worked at places I have pointed out in con- [428] fidential reports to the Government and found oil within twenty feet of where I predicted it. I am prevented by the Government regulations from advising practical men where to look for oil and have not advised them for that reason. I did not conclude that 100% of my predictions in the oil fields would come true; to err is human. My errors should not be at all common. As far as California is concerned, I would put myself on an equality with the average geologist who is familiar with the oil conditions. I say this on my experience in the oil fields since December, 1910.

I was not making examinations of the California oil fields in 1910 for the purposes of this litigation. I did not know anything about the litigation at that time.

My time was devoted to the oil fields in Kern County, to the portion extending from Lost Hills to Maricopa—the greater portion to the Buena Vista Hills and the Elk Hills.

The only two wells that I know of in the Elk Hills that have produced oil are the wells on 26-30-23 and 30-30-24. I do not know how much oil the well on 26-30-23 has produced. It has produced some oil.

The well on 26 did not contribute very largely to my knowledge of the conditions, not any more than the other wells, but as much as the well on section 30. I know from hearsay that those wells were not in existence in 1903 and 1904. I have seen the logs of those wells.

On account of the oil seeps existing to the west of the lands involved in this suit and on account of the favorable structural conditions of the Elk Hills, it was clear to me from the conditions existing in 1904 that the chances of finding oil in the Elk Hills were much more favorable than the chances of finding gold in quartz prospects, judging by the outcrops, because the conditions are so dissimilar between the accumulations of oil and the appearance of valuable minerals. The conditions favor oil.

The experience I had in determing whether the condi- [429] tions favored the discovery of oil in the Elk Hills was in the Lost Hills, Bellridge and the eastern extremity of the Buena Vista Hills where oil was discovered. Oil has been produced in paying quantities in Bellridge and the Lost Hills, and I think it will be on the Eastern extension of the Buena Vista Hills. They have not gone deep enough there. All indications bear out my predictions. In these instances I desire to be understood as having surely predicted the discovery of oil. I made a thorough examination of the territories mentioned and recommended their withdrawal. My recommendation was passed upon by the Classification Board of the United States Geological Survey and the lands were there-

after withdrawn by the President, and my prediction that the lands were petroliferous in character has come true. I would not say that I could always, or even 50% cent of the time, predict where oil would be found in paying quantities. I could not give any precentage because I would not predict that oil could be found in paying quantities unless under the most favorable circumstances.

I would not say that the discovery of oil is in the nature of a gamble. I would call it a speculation more than a gamble. A man that speculates most usually has some reason for speculating, while gambling is just taking a chance whether the man knows anything about it or not. Looking for oil in paying quantities is a speculation, but it is not a speculation to look for it in any quantities in new territory—absolutely not in certain territories.

If I had been on the ground in 1903 or 1904, I could have pointed to 30-23 in the Elk Hills and said: "I know there is oil down there," without any question of being correct. I would have said that the oil could be found within three or four thousand feet because of the depth of the wells then existing in the McKittrick field. The fact that the oil would be deeper in the Elk Hills was due to the fact that less erosion had taken place [430] and the overlying strata was thicker than in the McKittrick field.

In 1904, as nearly as I recollect, the wells in the McKittrick field were from six to eleven hundred feet, or maybe deeper.

The fact that I had examined logs of wells four

thousand feet deep did not influence me in reaching the conclusion that oil would be found between three and four thousand feet deep because when I first went into the Elk Hills, I didn't know the depth of the wells there. I had heard all kinds of rumors about the well in section 26 and very likely I had heard its depth.

No one told me to place myself exactly in the position of a man in 1904 when I examined the Elk Hills, and it did not occur to me to do that. As a man interested in the geology of the country and in ascertaining its character, I was in a state of mind in which I was ready to consider any evidence that bore upon the character of the Elk Hills and considered anything I observed or anything I heard and thought reliable, and the conclusion I reached at that time was based upon knowledge obtained in 1910.

Prior to going into the Elk Hills, I believe I had read Bulletin 406 by Ralph Arnold and Harry Johnson. I read all the geological publications with interest and care, if they pertain to any district in which I have to make an examination, and believe that I read what was printed in that Bulletin about the Elk Hills at that time or prior to the time I went into the field. I didn't read the whole of the Bulletin before I went into the field, but the greater part thereof and I think that part pertaining to the Elk Hills. I think I had a copy of the Bulletin with me and examined the country in connection with the maps accompanying the Bul-

letin. We devoted the greater part of our time during that period in December to section 24, 30-23 for the purpose of determining whether its chief value was for the oil or for Fullers Earth deposits. I came to the conclusion that it was [431] chiefly valuable for oil and so reported since that time.

Counsel for the defendant at this time asked for the production of the report made by the witness in connection with section 24, 30-23, and counsel for the Government, Mr. Mills, replied: "The reports made by the witness, or any person employed by the General Land Office, are of a confidential nature and transmitted to his immediate superiors; and I suppose that a subpoena duces tecum upon the proper officer of that Department will produce them if they consider it a matter of public policy to let them out.

"I want to say that I would have no hesitancy whatever, if the report were in my possession and not in contravention of the rules, to produce it on your request; but the reports, if any have been made, as the witness suggests, were made to his superior in a different Department than that I now represent, and I have no control over the report whatever. However, I cannot determine the public policy of any Department. If the report is to be released, I think on proper notice to the appropriate officials, the report can be obtained,—that is a matter for them to determine."

The witness, continuing, testified as follows:

I suppose I read that portion of Bulletin #406 contained on page 210 which reads as follows: "Assuming the thickness of the McKittrick formation to be about the same in the Hills as it is in the Midway and McKittrick district, that is, between fifteen hunred and two thousand feet, it seems probable that at the axis of the Elk Hills anticline, the oil bearing zone is from nine hundred to fourteen hundred feet below the surface"—if that is contained in the Bulletin.

As I have said, to err is human and I consider that statement a slip of Mr. Arnold's because there seems to be some [432] kind of a contradiction there if you consider his blue line on the map which he puts as a part of the 5000-foot limit. If the statement in the Bulletin was not a slip, the blue line should have been extended considerably further north when the dip of the formation is taken into consideration. Mr. Arnold's assumption does not come out. The actual tests in the field have shown his statement that oil should be found between nine and fourteen hundred feet, to be wrong. The 5000-foot limit indicated by the blue line is practically correct.

I consider Mr. Arnold a very competent geologist I found that Bulletin #406 appears to be unreliable so far as the Lost Hills are concerned. Maybe I didn't assume the same things that Mr. Arnold assumed. We didn't each have to make assumptions to start with; it depends a good deal on the time that certain assumptions are made. Developments in the oil field are going on continuously, and the man that

works in the field now has more data to go on than Mr. Arnold had.

There had not been, as far as I know, any oil found in the Elk Hills at the time I was there but developments had gone on in the McKittrick field, and so far as the relation between the oil fields as a whole were concerned, I certainly was in a better position than Mr. Arnold was when he went in there. Mr. Arnold's slip refers specifically to the Elk Hills in that peculiar instance and I was not in a better position than he was when I first went into the Elk Hills and considered them alone. Later developments confirmed my views.

I first went into the Elk Hills in December, 1910, the first part of the month. While I was there, I stayed at the camp of the Associated Oil Company in section 24. I went there the first day and remained until the next afternoon. I then went to Taft where I examined oil properties in that vicinity. I was there less than a week and then went to Maricopa for a few days [433] and then went into Red Rock Canyon north of Mojave and west of Cinco where I remained two weeks maybe. After that I went back to Maricopa, McKittrick or Taft. While there, I examined some oil properties, after which I went to San Francisco.

While I was in the Associated Oil Company's camp, I met one or two watchmen and had some conversation with them with reference to that section and with reference to operations there. I asked them a good many questions and got no satisfaction because

they were instructed by their superiors not to give out any information, so they told me. That is a general rule through oil fields. I got no information from them.

The next time I returned to the Elk Hills was sometime in May, 1911. I may have been there prior to that time. I travelled over the Elk Hills at that time from south to north and may have stayed on section 26 for lunch. I stayed at the Hill Crest property in 28-30-23 over night on one occasion, but don't know whether it was that time or not. I was over the Elk Hills at various times in 1911.

I made examinations of the territory at McKittrick in December, 1910, and have been over the McKittrick fields several times since then. I don't know just how often. I made an examination of the McKittrick fields a day or two before I went into the Elk Hills the first time. I discussed the McKittrick fields with several men on the oil wells, the drillers, and made inquiry as to the depth of the wells.

Q. By Mr. Lewers—Mr. Martin, did I understand that you returned from San Francisco to the vicinity of the Elk Hills about the month of May, 1911? Is that correct?

- A. It may have been the latter part of April.
- Q. Well, it was about that time?
- A. Yes sir.
- Q. Is that correct? [434]
- A. Yes sir.
- Q. And prior to that time, you had been in the Elk Hills not to exceed two days in all?

A. I believe that is right.

Q. And possibly not two entire days?

A. Well, we were two different days in succession in the Elk Hills.

Q. That is, portions of two different days?

A. Yes sir.

Q. After you returned from San Francisco in April or the first part of May, to what part of the field did you go first?

A. I cannot state now the exact date nor the exact places in the Elk Hills which I visited during any part of 1911 without referring to my note-book covering that time.

Q. Haven't you any recollection at this time in a general way where you went?

A. I do remember that I was on Section 30, Township 30 South, Range 24 East, sometime during 1911. I remember that I have been over 26 and have been on Section 26 during said year several times, and that I crossed the Elk Hills into the central and southerly direction and easterly and westerly, several times during said year.

Q. In what other portion were you during that period after you returned in April or May, 1911?

Were you at Sunset?

A. In what portion of the Elk Hills?

Q. No; of that country.

A. I have been all over the field,—Sunset, Buena Vista Hills, McKittrick, Cariso Plains,—in 1911.

Q. After you returned in April or first part of May, 1911, how long did you remain in that country?

- A. I don't recollect exactly. Several weeks.
- Q. And then where did you go? [435]
- A. As I said before, I don't remember the exact places that I went over during said year unless I refer to my note-book.
- Q. You remember whether you returned to San Francisco or not during 1911?
- A. Oh, I have been in San Francisco at least twelve times during 1911.
- Q. Then you did not remain continuously in the oil district?
 - A. No, I did not.
- Q. How much time were you in the oil district altogether in 1911?
- A. I believe the only other work I have done outside of the oil fields in 1911 was two trips to Goldfield, Nevada, another trip to Coaldale, Nevada, and one trip to the vicinity of Johannesburg, California.
- Q. I am not interested in places that you went, but I want to know how much time in all did you spend in the oil district after you returned there in April or May, 1911?
- A. I would say that I was in the oil fields themselves about three-quarters of the time.
 - Q. Three-quarters of the remainder of the year?
- A. Yes sir; not counting the time spent in San Francisco, about three-quarters of the year.
- Q. What portion of that time was spent in the Elk Hills?
- A. In the Elk Hills themselves perhaps, during said time, two weeks.

Q. Then most of your observations were carried on in other territory besides the Elk Hills?

A. In the territory in the vicinity of Elk Hills principally.

Q. A portion of that time you were over in the vicinity of the Lost Hills, were you not? [436]

A. Yes sir; I was there in April.

Q. When was it that you first went to what you call the gas blow-out in Section 32, Township 30-24?

A. In January, 1912.

Q. Now, when was it that you formed your conclusion first that you knew that there was oil underlying the Elk Hills?

A. After I had been there the first time, in December, 1910.

Q. How long after?

A. Right thereafter; shortly thereafter.

Q. Before you returned to San Francisco?

A. Yes sir.

Q. Did you form that conclusion while you were in the Elk Hills on that first trip?

A. Yes; from the observations made at that time and what I had learned before going in there.

Q. What you had learned and what you had read before going in there?

A. What I had read had something to do with it;
 yes.

Q. When you were in there on that first occasion, you saw no oil sands or gas blow-outs, did you?

A. Not in the Elk Hills; no.

- Q. And did you discover any anticline on that occasion?
 - A. Yes; the anticline structure is plainly visible.
- Q. Then, so far as your own observation went, at the time you formed this conclusion, you had seen nothing in the Elk Hills except evidences of an anticline? Is that correct?
- A. As far as the Elk Hills are concerned, yes; the anticlinal structure was the principal feature.
- Q. Is an anticlinal structure to your mind, or was it then to your mind, a sure indication of the presence of oil?
- A. Yes, if it lies in the vicinity of developed oil fields it is a most favorable place for the accumulation of petroleum. [437]
- Q. Then you took into consideration the fact that this laid in the vicinity of a developed oil field, did you?
 - A. I did.
- Q. Then, you didn't judge that from the standpoint of a man who went in there in 1903 or 1904, long prior to the development of any oil territory, did you?
- A. I don't think that I was thinking about 1904 at that time. I had no occasion to think of it.
- Q. Then why did you testify on your direct examination that a man in 1903 or 1904 would have known that that contained oil?
- A. Because the anticlinal structure was there at that time and the oil seeps existed at that time.
 - Q. You didn't see them, did you?

A. Those at McKittrick I am referring to, or the vicinity of McKittrick.

Q. Then you were drawing your conclusion at that time on the basis of what was developed or shown at McKittrick, were you not?

A. Partly; along with the anticlinal structure of the hills.

Q. You have seen many anticlines that were not oil formations, haven't you, in the course of your life?

A. Yes, but not in the vicinity of oil fields.

Q. Did you at that time know what development there had been at McKittrick in 1903 and 1904?

A. Not of my own personal knowledge.

Q. You didn't know at all?

A. No.

Mr. Mills—The question is objected to because the witness has testified on government's Exhibit I showing the state of the development in 1904.

Q. By Mr. Lewers—Did you at that time have in your [438] possession a copy of government's Exhibit I?

A. No.

Q. It was not in existence, was it?

A. No.

Q. Then, whatever conclusion you reached in December, 1910, had no relation to government's Exhibit I?

A. No.

Q. Did you in December, 1910, know anything about what development there had been at McKit-

trick or in the vicinity of McKittrick in 1903 and 1904?

A. None, except as I gained it from reading reports which mentioned the years in which the vicinity of McKittrick was developed.

Q. Which report did you read that mentioned that?

A. I think there is something in the 406 Bulletin of the United States Geological Survey.

Q. You think there is?

A. My recollection is that there is.

Q. That is the report to which you referred as having read before you went in there in December, 1910, with reference to the development of McKittrick?

A. Yes, sir.

Q. Was there any other?

A. No; not that I recollect now.

Q. And you are certain that bulletin No. 406 says anything at all about development that existed at McKittrick and its vicinity in 1903 and 1904?

A. I think it gives a history of the early oil development.

Q. But you are not sure, are you?

A. Not absolutely sure.

Q. Now, isn't it a fact that whatever conclusions you reached in December, 1910, or later on with reference to the Elk [439] Hills, were based upon everything which you had heard that you regarded as worthy of consideration, and upon all of the things

which you observed, not only there, but around Mc-Kittrick and in the other portions of the oil fields?

A. I cannot state exactly the condition of my mind in various parts of the year 1911. I cannot disassociate things which I may have learned in one part of the year with several things which I may have learned later.

Q. Did you ever make any effort to disassociate any fact that you had in your mind from other facts in order to reach conclusions during the entire time that you were in that territory?

A. Well, during the entire time of 1911, I have considered the Elk Hills as being oil in character.

Q. That is not the question. Are you prepared to state now that at any time in 1910 or 1911 you deliberately endeavored in your own mind to reach a conclusion as to the character of that country in the Elk Hills, during which effort you eliminated from your consideration facts or reports which you had received concerning matters discovered after 1904? Do you understand the question?

Mr. Mills-I don't.

A. I don't know that I did. I would have to refer to reports made at different times in the said year, and they would then state just exactly what I thought at that time. Now, I am not prepared to state that I did.

Q. By Mr. Lewers—You made your reports from time to time on the basis of what you learned up to that time?

A. Yes; up to the particular time that I made my reports.

Q. And in doing that you took into consideration everything you had learned?

A. Everything I had learned previously.

Q. Then you never were in the position where you could say [440] that your mind was in exactly the same condition that it would have been had you gone in there in 1903, under the conditions then existing?

A. Yes. I think under the conditions existing in 1903 I would have formed the same opinion which I have formed since.

Q. You would have formed the same opinion in 1903 that you did in December, 1910? Is that correct?

A. Yes.

Q. And at that time you would have formed the opinion that there was oil in that territory somewhere between three and four thousand feet beneath the surface?

A. At about that depth; yes.

Q. Now, in December, 1910, you had been in the Elk Hills a portion of two days; had seen nothing but some indications of an anticline. Were you able with merely those indications in the Elk Hills to determine whether that oil was one thousand or twenty thousand feet beneath the surface?

Mr. Mills—The question is objected to because the assertion in the question is not according to the facts. He did not limit his observations to the anticline.

- A. I testified that the oil near McKittrick was found at a depth between six and eleven hundred feet, and I concluded after an examination of the Elk Hills that the strata under the Elk Hills overlying the oil sands were considerably thicker and, therefore, put my estimation as stated of the depth.
- Q. By Mr. Lewers—Were there any wells in Mc-Kittrick in 1904 eleven hundred feet deep?
 - A. I don't know.
- Q. Then you don't know now what the conditions at McKittrick were so far as the discovery of wells and the depth was concerned in 1904, do you?
 - A. Except what I have heard. [441]
- Q. Did you hear that there was any well in Mc-Kittrick eleven hundred feet deep in 1904?
- A. It seems to me that I have heard that statement.
 - Q. Had you heard that in December, 1910?
- A. I don't recollect. I may have heard that while in the McKittrick field at that time.
- Q. Where is this well that is eleven hundred feet deep?
 - A. I don't recollect.
 - Q. Did you see it?
 - A. I don't recollect that.
 - Q. Did you have a log of that well?
 - A. No.
- Q. Did you know through which formation it passed?
 - A. Not having seen the log, I did not.

- Q. Did you know whether that well had revealed any oil or not?
- A. I believe I heard in December, 1910, that wells had been sunk to eleven hundred feet and had discovered oil.
 - Q. What kind of oil?
- A. Low gravity oil, of the same character as found in the vicinity of McKittrick.
 - Q. What is that character?
 - A. Low gravity.
 - Q. What gravity?
- A. As near as I can recollect, it was 15 and 16 degrees.
- Q. Is the oil in the vicinity of McKittrick of low gravity generally?
 - A. That is my impression.
 - Q. Do you know?
 - A. Yes; what I have seen there.
- Q. Now, in passing upon that territory and its oil possibilities, as a scientific expert don't you think it was important to [442] ascertain what sort of oil is found at McKittrick?
 - A. Yes.
 - Q. And you did so?
 - A. Yes sir.
- Q. And yet you cannot at this time state what it was?
 - A. I said that it was of low gravity.
 - Q. Uniform, was it?
- A. No, I wouldn't say it was uniform—of the same degree of gravity all over the field.

- Q. Well, what was the variation?
- A. I don't recollect.
- Q. Did you ever know?
- A. I have heard and read of the gravities, yes.
- Q. Did you make any personal investigation to ascertain?
- A. No; I never determined the gravity of any oil.
- Q. Did you make any investigation at McKittrick during any of the time you were in there as to what sort of wells were being sunk to the eastward toward the Elk Hills?
- A. Yes; I have seen wells to the eastward from McKittrick.
 - Q. How deep were they—the ones you observed?
- A. The Newman-Morris well was twenty-two hundred feet, as near as I can recollect.
 - Q. What sort of oil did they find?
 - A. They hadn't found any oil at that depth.
 - Q. How far was that from McKittrick?
 - A. Two miles.
 - Q. In what section and township?
 - A. 26, 30-22.
- Q. You say that well at the time you observed it was twenty-two hundred feet deep?
 - A. Yes.
 - Q. And no oil in sight? [443]
 - A. No.
 - Q. Did you obtain a log of that well?
 - A. Yes, I have seen a log of that well.
 - Q. Did you observe any other wells besides this

one lying to the east of McKittrick toward the Elk Hills?

- A. No.
- Q. What did you determine was the overlying formation at McKittrick?
 - A. Sand, gravel and clays.
 - Q. Belonging to what period?
 - A. It has been termed the McKittrick period.
 - Q. That is purely a local name, isn't it?
- A. Yes. It has been termed that by the U. S. Geological Survey.
- Q. Did you determine yourself to what period that formation belonged?
 - A. No, I did not.
 - Q. Do you know what period it belonged to?
- A. No; for the reason that I considered it of no importance what particular geological age any period belongs to, as long as it overlies a formation which carries oil. It doesn't matter what you call it.
- Q. But you would consider the formation which carries oil of importance, wouldn't you?
 - A. I would, as long as it carries oil; yes.
- Q. And did you determine what formation carried the oil at McKittrick?
- A. No, I did not do so myself. I was not interested in the geological age, as long as it carried oil. Of course, I accepted the statements made by the United States Geological Survey.
- Q. You accepted the statements made by Mr. Arnold, did you?

A. That it belonged to a certain geological age, yes. [444]

Q. Did you accept the statement made by Mr. Arnold in bulletin No. 406?

A. Yes, as far as the ages of the formations are concerned.

Q. That is, in that respect your conclusion agreed with his?

A. I just accepted his statements; I did not check them up.

Q. You reached no conclusion based on your own independent observation?

A. So far as the age of the formations is concerned, no.

Q. Did you consider yourself qualified to reach a conclusion as to what period the oil-bearing formation belonged to?

A. If I had devoted sufficient time to it, I think I could have determined it.

Q. But you did not attempt to do so?

A. No.

Q. Did you not regard that as having some bearing upon the determination of whether or not the Elk Hills was oil territory?

A. No; I did not consider the age of any formation of any importance whatever in determining the oil area. As long as an oil-bearing formation exists and is overlaid by another formation which is capable of accumulating oil, that is the most important thing. Q. Did you see any formation at McKittrick that you determined was an oil-bearing formation?

A. The oil itself—the oil exudation in the vicinity of McKittrick, I considered the best evidence.

Q. Did it occur to you that those exudations, as you call them, might have come from some considerable depth through an open stratum?

A. I did not take into consideration—Oh, they certainly came from some depth.

Q. Didn't it occur to you as important to ascertain, if possible, how deep the oil producing formation was? [445]

A. I have already stated that I learned of the depth of oil sands in the vicinity of McKittrick on my first visit there.

Q. And how deep did you learn they were?

A. From four hundred feet up, at those wells where we inquired for the depth.

Q. And what determination did you reach as to the thickness of the overlying formation which you call the McKittrick formation at McKittrick?

A. No particular thickness.

Q. That is, you reached no conclusion as to the thickness?

A. Except that it increased toward the west—toward the east.

Q. Didn't it occur to you that it was important to determine how thick it was when you started, in order to determine how thick it was when you got over into the Elk Hills?

A. At that particular time I did not pay so much

attention to the thickness of the overlying formation in the vicinity of McKittrick, except that they thickened toward the east.

- Q. What was the dip toward the east? Did you ascertain that?
- A. I don't recollect off-hand except that I checked the dip at several places as indicated on that Exhibit F.
- Q. The question is, Did you ascertain what its dip was toward the Elk Hills. I am not asking what the dip was, but did you ascertain what it was?
 - A. Yes sir.
 - Q. What was it?
 - A. I don't recollect. I just checked the map.
 - Q. Did you make any note of the dip?
- A. If I made any note, it would read "Checked with Arnold's map."
 - Q. You took Arnold's word for it? [446]
- A. No; I said I checked as far as that particular territory is concerned on Mr. Arnold's work.
- Q. Will you tell me just how you went about checking Mr. Arnold's determination of that dip? Tell me the whole process.
- A. We went over the territory south and east of McKittrick and located some of the dips which are indicated on this map, government's Exhibit F, and measured them ourselves.
- Q. How did you find them revealed? How were they revealed on the ground?
 - A. On exposed strata.
 - Q. Where?

- A. As indicated on this exhibit.
- Q. Will you kindly tell me where?
- A. I don't recollect any of them just now except as we went over the territory in a general way.
- Q. Isn't it a fact that you are unable to tell me what you did, without referring to that map?
 - A. Oh, no.
- Q. And is it not also a fact that you did not make any such determination, but that you took Mr. Arnold's conclusion?
- A. No. I have never taken Mr. Arnold's conclusions solely. I have always checked them in the field before I accepted them.
- Q. Now, at how many places, stating their location with reference to McKittrick, did you find any indications of strata by which you could determine the dip toward the Elk Hills?
 - A. I can't recollect the exact number of places.
 - Q. How many places did you observe in fact?
 - A. I can't recollect how many.
 - Q. Did you observe any?
 - A. Yes sir.
- Q. And did they all show the same dip—the same angle?
 - A. No; they did not. [447]
- Q. Did the dip diminish or increase as you approached the Elk Hills?
 - A. The dips were very variable.
 - Q. Will you kindly answer the question?
- A. As near as I can recollect, they increased and decreased both.

Q. Did you discover any indication of synclines between McKittrick and the Elk Hills?

A. A syncline must exist since in the Elk Hills the dips are the other way.

Q. Then you did discover evidences of a syncline?

A. As near as you can discover any syncline.

Q. Were you able to determine the depth of the formation of that syncline which you call the McKittrick formation?

A. No; I am not able to determine the depth of the axis of the syncline.

Q. Is this twenty-two hundred foot well that you examined in this syncline?

A. No. I think not.

Q. Don't you know?

A. I think it is on the flank of the McKittrick anticline.

Q. That is, it is west of the syncline, is it?

A. It would be west of the syncline; yes.

Q. Now, from the time when you discovered the indications of a syncline until you got into the Elk Hills, did you see any evidences of the deep of the McKittrick formation toward the Elk Hills?

A. No. After entering the Elk Hills from the south, the dips are to the south and southwest.

Q. What assistance did that fact furnish you in determining the thickness of the McKittrick formation in the Elk Hills?

A. I stated before that the reason I thought the thickness [448] of the formation in the Elk Hills is greater than at McKittrick is on account of the fact

that less erosions have taken place in the Elk Hills than near McKittrick.

Q. Did you determine how much erosion had taken place at McKittrick?

A. No, I did not.

Q. Did you determine during what period that erosion had been going on?

A. No, I did not. The reason that more erosion has taken place in the McKittrick anticline is because the structure is more broken up and of a steeper dip, while in the Elk Hills anticline the dips are low and gentle.

Q. Then that is your reason for concluding that there was more erosion at the McKittrick side, is it?

A. Because the strata has been more fractured; yes.

Q. In your opinion, during what period of time had this erosion been going on in the Elk Hills?

A. Since they were first folded up.

Q. And during what geological period was that?

A. My opinion, during the same time that—I am not prepared to state now whether the Elk Hills fold was created later or at the same time that the Mc-Kittrick anticline was folded.

Q. Are you prepared to say whether that occurred in recent times geologically or during some earlier period, and, if so, in what period?

A. I didn't make any particular study, as I stated before, of the geological periods or of their particular age, since I was not interested in it, and our work is not along such lines.

Q. But as a scientific geologist, wouldn't it be the first thing that you would endeavor to determine?

A. If I was sent there for that purpose, yes; but such work is left to the United States Geological Survey or other [449] geologists or scientific bureaus.

Q. You know it is not of the archaean period, don't you?

A. Yes I know that.

Q. Is it Miocene or Pliocene or Eocene?

A. I think it covers all the last three periods mentioned—what do you refer to?

Q. The McKittrick formation. What you call the McKittrick formation.

A. It covers the upper Miocene, Pliocene and Pleistocene.

Q. Do you think it covers the Eocene?

A. The McKittrick?

Q. Yes sir.

A. No, I don't think so.

Q. Why do you say that?

A. Well, I have examined fossils from the formation in the Lost Hills occurring at the base of the Mc-Kittrick, and said fossils only occur in the Miocene and not in the Eocene.

Q. Did you ever find any fossils in the Elk Hills?

A. No, I did not.

Q. Did you ever hear of anything found there?

A. No, I don't think I ever heard of any.

Q. What relation do any fossils have to the Elk Hills?

- A. Because the Lost Hills and the Elk Hills are of the same formation.
 - Q. How do you know?
- A. From a general knowledge of the oil fields and the territory intervening.
 - Q. Have you a general knowledge of the oil fields?
 - A. I think so.
- Q. Now, Mr. Martin, if you did not make any determination of the thickness of the overlying formation at McKittrick, of what advantage was it to you to determine the dip or to check [450] the dip of that formation toward the Elk Hills, in reaching a conclusion as to the depth of that formation in the Elk Hills?
- A. It is always my practice to check any map made by somebody else when I am in the field, and cover the same territory.
- Q. Wasn't one of the necessary and absolutely essential factors in working out the depth of the Elk Hills, the thickness of the formation where you found your dip?
- A. The reasons for saying that the depth of the oil sands in the Elk Hills is between three and four thousand feet is not solely the dip along the anticline south of McKittrick, but also from the fact that the Buena Vista Hills are very similar to the Elk Hills; that the formation appears to be the same; and that oil has been found in the Buena Vista Hills at twenty-six hundred and three thousand feet.
- Q. That fact aided you in determining the depth at the Elk Hills?

A. Yes sir.

Q. And that was more important to you in determining the thickness of the formation in the Elk Hills than the dip was?

A. The similarity of the formation in the Buena Vista Hills and in the Elk Hills, and the similarity of the structure of both territories had very much to do with the conclusion I arrived at the oil possibilities of the Elk Hills.

Q. Would a man in 1903 have known anything about that well in the Buena Vista Hills?

A. Not about that well, but there are some seepages in the Buena Vista Hills.

Q. That well was not sunk till 1910, was it?

A. No-when?

Q. 1910. You are referring to the Honolulu well.

A. Yes. I think the Honolulu well reached oil sand in the latter part of 1909. [451]

Q. That Honolulu well had considerable influence in your mind in reaching your conclusion as to the character and depth of the formation in the Elk Hills?

A. Yes; a good deal to do with it.

Q. More than any other single thing, didn't it?

A. Well, no. I wouldn't put it that way. You might say it confirmed the conclusion which I had previously arrived at.

Q. You say it confirmed the conclusion you had previously arrived at? Did you arrive at a previous conclusion concerning the depth at Elk Hills?

A. Yes, as I stated before-

Q. What was that conclusion that you arrived at previously?

A. I stated about a dozen times that I thought it was between three and four thousand feet.

Q. If the Honolulu well merely confirms your previous conclusion, will you tell me on what you based your previous conclusion that it was between three and four thousand feet deep?

A. Because I have stated several times that the formations over the Elk Hills—existing in the Elk Hills—are thicker and that less erosion has taken place, which is visible from an examination in the field.

Q. How much thicker did you determine that formation was than the McKittrick formation at McKittrick?

A. Over two thousand feet.

Q. Then you did determine how thick the formation was at McKittrick?

A. I stated several times that the formation at McKittrick was from four hundred to eleven hundred feet, as I had been told.

Q. Then you would not agree with Mr. Arnold's statement on page 210 of bulletin 406: "Assuming the thickness of the McKittrick formation to be about the same in the hills as it is in the Midway and McKittrick district, that is, between fifteen [452] hundred and two thousand feet, it seems probable that at the axis of the Elk Hill anti-cline the oil-bearing sand is from nine hundred to fourteen hundred feet below the surface. Is that correct?

Mr. Mills—Objected to because it has already been answered.

Mr. Lewers—Not with reference to the thickness at McKittrick. The question is directed specifically to whether you agree with Mr. Arnold's assumption that the McKittrick formation at McKittrick is between fifteen hundred and two thousand feet.

A. No; I don't agree with that for the simple reason, as I stated before, that I do not believe Mr. Arnold wanted to state that. In this connection, that may be a typographical error, as are several others in this book, and I would just as well point out another typographical error in this book which is on page 79, the fourth line from the bottom, which reads: "So far as dikes of this character in Section 27, Township 30 South, Range 23 East,—" He evidently means Range 22 East. I am not responsible for the printing of that bulletin.

Q. Now, you started out to check Mr. Arnold's conclusion. Didn't you put in your note-book any comment on the fact that his assumption of from fifteen hundred to two thousand feet of thickness at McKittrick was a typographical error?

A. I don't know that I did.

Q. Have you that note-book with you?

A. No; I have not.

Q. Have you any of your note-books with you?

A. Yes.

Q. Didn't you regard it as important to have your note-books here during your testimony?

A. I have them all here except the one referring

to December, 1910, and I thought I had that one with me, but it is not here. [453]

Q. Didn't you at any time subsequent to December, 1910, endeavor to ascertain the thickness of the overlying formation at McKittrick, for the purpose of checking Mr. Arnold's work?

A. I believe the statement which Mr. Arnold made there is a general statement, if you read it.

Mr. Lewers—I move that that be stricken out as not responsive.

Q. I wish you would pay attention to the question. (The question is read by the reporter.)

A. I don't recollect that I did, as far as McKittrick is concerned. I beg your pardon. Did you mean McKittrick or the McKittrick formation?

Q. The McKittrick formation at McKittrick.

A. I did not, as far as the McKittrick formation at McKittrick is concerned, as near as I can recollect.

Q. Didn't that great diversion between your and Mr. Arnold's conclusions strike you as of some importance?

Mr. Mills—I object to that because it has been gone over at least four or five times, as the record will show.

A. I don't know that I did. It may and it may not.

Q. By Mr. Lewers—You realized, did you not, at that time, the necessity of as close an approach to scientific accuracy as was possible?

A. I didn't know anything about this particular suit in December, 1910. I went over into the Elk

Hills to examine Section 24, 30—23, for one particular purpose, and we did so.

- Q. If you went purely for the purpose of examining that with reference to fuller's-earth deposits, why was it on your way over that you checked Mr. Arnold's map as to the dip of the McKittrick formation?
- A. Because the day previous we spent at McKittrick, or some time prior to our trip to Elk Hills we spent in McKittrick, [454] and, as I said before, it is my custom and the custom of any man, I think, to check on any map which he may have with him to find out whether it is correct or not.
- Q. Later on you became acquainted with the fact that this present suit was contemplated, didn't you?
 - A. Yes sir.
- Q. And you later on learned that this suit had been brought, did you not?
 - A. Yes sir.
- Q. After you had learned that, after you went into the country to make a more careful investigation, did you not think it necessary to determine accurately as far as possible the thickness of that formation at McKittrick?
- A. At that time I knew I had seen the logs of so many wells,—the logs of the Associated Oil Company and the Elk Hills included, that I paid no more attention to the work around McKittrick except to go over it again in a general way and extend my examination farther to the southeast.

- Q. What were you doing in there at that time, Mr. Martin, after you had examined for fuller's-earth?
 - A. At what time?
- Q. In your subsequent visit to the Elk Hills, what were you doing?
- A. To learn the progress the Associated Oil Company was making in their wells; to complete more closely the dips—to work out more closely the structure of the Elk Hills and similar work—in order to determine how far the 5000-foot limit would go to the north, for instance, in one particular instance. I have to determine before any mineral application goes to patent whether any land is mineral or not. For instance, if an agricultural entry is made in the withdrawn area.
- Q. Then one of your purposes was to determine how far [455] north the 5000-foot depth limit went, was it?
 - A. Yes sir.
- Q. In determining that didn't it occur to you that it was important to determine the thickness of the formation at McKittrick?
- A. I knew the thickness of the McKittrick formation since I had seen and studied the location of the Associated Oil Company in the Elk Hills.
 - Q. And how thick was it?
- A. These logs have been given to me confidentially. I don't know whether I am at liberty.
- Q. I want you to tell me what the determination was. Don't worry about the logs.

Mr. Mills—Are you speaking for the Associated Oil Company?

Mr. Lewers-No.

Mr. Mills-You were the other day.

A. I don't feel at liberty to give out any information that was given to me confidentially, unless I am released.

Q. By Mr. Lewers—The question was not what any log showed. What I want to know is how deep do you determine the McKittrick formation to be in the Elk Hills?

A. Since I determine that formation from the log, it amounts to the same thing.

Q. Will you kindly answer the question?

A. What is the question? (The question is read).
I don't feel at liberty to answer the question.

Q. Do you refuse to answer it?

A. I would like a ruling upon it.

Q. There is no ruling to be made, unless you make it.

A. By Mr. Mills—Did you receive these reports confidentially from the Associated Oil people? [456]

A. I have.

Q. And was it understood at the time they were given to you?

A. Any information given to me by Mr. Williams, chief geologist of the Associated Oil Company, has been treated confidentially by me since I have had it.

Q. Mr. Mills—Let the record show that Mr. Williams, chief geologist of the Associated Oil Company, is in the room, the person from whom he received

the information, and if he releases him he can answer the question.

Mr. Lewers—Let the record show that I want to know the determination he reached. I don't care how he reached it.

Mr. Mills—The witness says he arrived at his determination from the logs.

Mr. Lewers—As a matter of fact, you have already put it into the record as to the depth of that well.

Mr. Mills-Not with this witness.

Mr. Lewers-No; from another witness.

Mr. Mills—We got it from one of the Associated Oil people.

Q. By Mr. Lewers-Answer the question.

A. My answer is the same; that I refuse to answer the question unless released by the Associated Oil Company, as the information was given to me as confidential and will be treated by me as such until released.

Q. Did you base the location of that red line on Exhibit O which you have introduced and prepared upon your determination as to the depth of the Mc-Kittrick formation in the Elk Hills—this brown line?

A. No; the brown line denotes what is commonly termed the Elk Hills territory.

Q. Then you don't intend that as any representation of the [457] limits of the oil territory?

A. No sir.

Q. Where do you put the limits—the 5000-foot limit on the north side of the Elk Hills—with ref-

erence to the point where it was placed by Mr. Arnold?

A. As near as I can recollect I pulled it in.

Q. How much?

A. I don't recollect now the exact distance, but I should say a half a mile, as near as I can recollect.

Q. Why did you do that?

A. I took the dips of the strata in the Elk Hills into consideration, and the depth at which oil had been found in the Elk Hills.

Q. That is, you took into consideration one factor which you now refuse to state, did you?

A. Yes; the depth of the oil sand.

Q. And did you make any report as to the outside limits of possible oil development based on your examination of the Elk Hills?

A. I made a report pertaining to one particular entry.

Q. You made that report to the government, did you?

A. Yes.

Q. And you used as a basis of the report this confidential information you had obtained from the Associated Oil Company?

A. I did.

Q. And yet you refuse to give me the conclusion which you reached as the depth of that formation in the Elk Hills?

A. Because my reports to the government are confidential and are treated as such, and plainly marked as such.

Q. And the important factor in determining this outside limit was the depth given as confidential, was it?

A. Yes; and the dips exposed on the north slope of the [458] Elk Hills.

Q. Did you determine that in 1904?

A. Not the exact depth at which the oil sands were found.

Q. Now, Mr. Martin, as an oil expert will you tell me what matters you regard as important in determining whether any particular territory you are examining is valuable for oil. I mean valuable for oil commercially.

A. The structure of the territory, I think, is most important, and its vicinity to a proven field.

Q. Let us take the structure first. What is the important thing about the structure?

A. Well, being a fluid, oil naturally follows the law of gravitation the same as water, and oil and water existing in a strata, and oil being lighter than water, oil will naturally flow to the highest place it can migrate into. That is, the water would displace the oil in the syncline and force it to migrate to the anticline—the axis of the anticline and its flanks.

Q. Wouldn't it be at all important to ascertain whether there is any oil formation that produces the oil to go into that anticline?

A. Yes; I said that in my former answer.

Q. Wouldn't that be your first consideration?

A. I said that oil or evidences of oil must be somewhere.

Q. Would mere evidences of oil be sufficient to permit you to go into the secondary stage of your examination concerning the existence of the anti-cline?

A. As I stated before, if oil exists at all the top of the anticline or its flanks on either side are the most favorable places for petroleum to accumulate.

Q. Let us devote our attention to the first requisite. Suppose you had found a gas blow-out such as you found in [459] Section 32 in the next township. Would that be enough?

A. It would indicate to me that petroleum was in

that vicinity.

Q. Now, if you were passing on a question for a man who desired to prospect the territory for the purpose of developing oil to sell in the market, and you found a gas blow-out of that kind, would you stop there and tell him that was enough evidence to sink a well on to get a well for the market?

A. If the structure was favorable I would say yes.

Q. What do you mean by a favorable structure?

A. I have stated it time and again. I mean thereby an anticlinal structure.

Q. Might it not be possible to have the most perfect anticline in the world and yet not have enough oil to be extracted at a profit?

A. I can imagine of such conditions, yes; but they are in the great minority. You may take nearly all the oil fields of the world and they have first been developed along the anticline.

Q. Do you know that from experience?

- A. No, but that is a matter of fact to any one who has read anything about it.
- Q. You are basing that on your conclusions that you have arrived at by—
- A. The statements made by writers who knew what they were writing about.
- Q. Well, assume that such available oil deposits have been found in anticlines. Can you reason back as to the commercially scientific proposition that after you have an anticline you are going to have the oil?
- A. If the anticline is in the vicinity of an oil field, and an oil seepage occurs on or near the crest of said anticline, I should certainly say that the land was oil in character. [460]
- Q. Would the age of the underlying formation have any influence on your opinion?
- A. No; the seepage itself would be evidence enough that the oil must be there.
- Q. In what sort of formation does oil occur? That is, from what sort of formation is it developed?
- A. The oil is developed from diatomaceous shales or in diatomaceous shales, and migrates from there into the overlying porous strata.
- Q. Wouldn't it be important to you to determine whether there was any shale which you have referred to from which the oil is developed?
- A. Such shales do exist to the west of the Elk Hills in the Temblor region.
- Q. Do you know whether it existed under the Elk Hills?

A. I know now.

Q. As a result of this confidential information?

A. From an examination of the field as a whole I concluded that it extended under the Elk Hills.

- Q. Would the existence of the wells which you observed when you went in there in 1910, without that would you have known whether there was any oil producing shale beneath the McKittrick formation in the Elk Hills?
 - A. There were no wells in the Elk Hills in 1910.
 - Q. I know it. I am very well aware of it.
 - A. Then I don't understand your question.
- Q. Isn't it a fact that if you went on the ground in 1904 you would have had no possible way of knowing whether there was any oil shale under the Elk Hills?
- A. The seepage certainly indicates that the oil must have come in from somewhere, and since the oil is created in the shale, it must have come in from the shale underlying the Elk Hills. [461]

Q. That would be all the evidence you have?

A. And the shale outcroppings further to the west.

Q. Where?

A. In the Temblor Range as indicated on my last exhibit.

Q. How many miles?

A. Oh, six miles.

Q. Is there a shale outcropping six miles from any portion of Township 30-23?

A. Yes; in Section 31, Township 30-22.

Q. How is it there revealed?

A. I remember having seen a shale outcrop there near a gypsum mine. A shale dipping to the east.

Q. How much shale was there exposed? What thickness?

A. In that particular place it was a small spur, perhaps 20 or 25 feet.

Q. To what period did that shale belong?

A. The Monterey formation.

Q. How do you know?

A. It was older—it underlies the McKittrick formation.

Q. Is that your sole reason for saying it belonged to the Monterey formation?

A. Well, it has been termed the Monterey formation and is an older formation than the overlying McKittrick formation.

Q. Couldn't it be still older than the Monterey formation?

A. No, because I think it is the Monterey formation.

Q. Did you make an examination of it to determine whether it was the Monterey formation or whether it was not a still older shale?

A. No; I didn't make an examination except that that formation there is underlying the McKittrick formation.

Q. If there were any of what Mr. Arnold called Vaqueros formation it would be underlying the Mc-Kittrick? [462]

A. Yes, but the Vaqueros looks entirely different; it is easy to distinguish the two.

Q. How do you distinguish between the two?

A. Monterey is a shale and Vaqueros is a sandstone.

Q. That is your sole manner of distinguishing between the two?

A. And their relation structurally—their location structurally.

Q. You have already given that. I will ask you another question. Does shale occur in any age except the Monterey?

A. Yes; you find shale more or less in all the formations. The logs will show that.

Q. Is it not also a fact that so far as the appearance is concerned that it is a matter frequently of great difficulty to determine whether a particular shale formation belongs to one period or to another?

A. If you would just take that shale formation locked up in a room twelve by twelve, you might find it difficult; but in a field you have a whole territory to look at.

Q. Then it is very easy in the field, is it?

A. Comparatively so, yes sir.

Q. What method is employed by geologists who are familiar with their business, in determining the age of any particular kind of shale?

A. Collect fossils if they can find any.

Q. Did you endeavor to collect any fossils from this shale exposure?

A. I did not. I told you why. My line of work

is entirely different from that of the paleontologists of the United States Geological Survey.

- Q. They endeavor to find fossils, do they not, for the purpose of fixing that shale in its proper period? [463]
 - A. They do.
 - Q. And that is the recognized test, is it not?
- A. It is, yes. But they don't collect fossils from every exposure. After a formation has been recognized in the field, they don't go by fossils alone, but also from its appearance. Any man with experience can tell after he has worked in the field some time without looking at the fossils if they should exist, at every exposure as to which period they belong.
 - Q. Can you so determine?
 - A. A good many cases, yes.
 - Q. Can you in each case?
 - A. I should answer no to that.
- Q. Could you in this particular case determine to what period this shale that you found exposed belonged?
 - A. From its position structurally, yes.
 - Q. Just from its position?
 - A. Structurally; yes.
- Q. It might have belonged to an entirely earlier period, might it not?
 - A. Well, it doesn't.
 - Q. It might have, might it not?
- Mr. Mills—He has answered already that it does not. He has asserted a fact, and now you ask him if it might not.

- A. You must frame your question in such a way that it is possible to answer. It might not, after I stated that it did not.
- Q. By Mr. Lewers—As a matter of fact, Mr. Martin, do you know what period that shale did belong to?
- A. Yes, from its appearance and structural position I believe it belongs to the Monterey formation.
- Q. And it might have been Eocene shale, might it not?
 - A. No. [464]
 - Q. Why not?
- A. Because it is overlaid by the McKittrick formation, and the Eocene is below the Monterey.
- Q. If it had been Eocene shale wouldn't it have been overlaid by the McKittrick formation?
- A. If the Monterey and other formations had been eroded, yes.
- Q. That is just what I am coming to. Do you know that they had not been eroded?
 - A. As near as I can recollect, no.
 - Q. But do you know?
- Mr. Mills—He has answered the question. He has stated as near as he recollects.
 - A. No; I don't think they were eroded.
- Q. By Mr. Lewers—Then, if it was easy to determine that, why do practical and competent geologists resort to the fossils tests?
- A. They have to start in with something in coming into a new field.
 - Q. Let us assume now that this Monterey shale

—that it is Monterey shale. Does Monterey shale produce oil?

A. If it is overlaid by a porous formation into which the oil can migrate, yes sir.

Q. How do you know that?

A. That has been proven in the field.

Q. By you?

A. No; by numerous oil operators.

Q. Who told you that?

A. Mr. Williams.

Q. Mr. Williams told you that Monterey shale produces oil, did he? Did he, Mr. Martin?

A. That diatomaceous shale contained in the Monterey [465] formation produces oil. Mr. Arnold makes that statement, and various writers on the California oil fields.

Q. Is there any Monterey shale that is not diatomaceous?

A. Yes sir; there may be certain strata or certain parts of the Monterey shale which are not diatomaceous.

Q. Would that produce oil?

A. No.

Q. Then the mere discovery of Monterey shale would not be a determination that it was oil producing shale?

A. Certain parts of the Monterey shale are diatomaceous.

Q. You would always have to ascertain whether the particular formation of the shale was diatomaceous, wouldn't you?

- A. Yes sir.
- Q. Did you so ascertain?
- A. In each instance.
- Q. Where you found the shale exposed?
- A. No, we did not.
- Q. Let us assume that it was diatomaceous Monterey shale, oil producing. Does any other shale produce oil?
 - A. Any other-
 - Q. Any other kind of shale?
- A. As far as I know in the California fields, the diatomaceous shales are the origin of the oil.
 - Q. What is the oil?
 - A. Petroleum.
 - Q. What is petroleum?
 - A. A hydrocarbon.
 - Q. What kind of a hydrocarbon?
 - A. Of no fixed chemical composition.
 - Q. From what does it come originally?
 - A. From organisms such as diatoms.
 - Q. Then it is animal in its origin entirely? [466]
- A. That is a mooted question. In my opinion it is.
- Q. Well, then, let us take all the favorable assumptions to that shale that we can,—that it is Monterey diatomaceous oil producing shale, and that your gas blow-out over in Section 32 in the next township came from the same shale. Now, as a commercial proposition, could you yet tell your client that he had a sure thing to develop oil in paying quantities? What would be your next factor?

A. No; I would not be able to state that it would be found in paying quantities. I would be able to state that it would be found there; that oil would exist below the Elk Hills.

Q. But he wants to know whether it would be in paying quantities. What is the next thing you would try to find out for him.

A. Whether it is found in paying quantities?

Q. He wants to know whether it would be.

A. I would advise him to bore.

Q. That is the only way he would be able to find out?

A. That would be the only way to find out whether it was in paying quantities or not.

Q. Now, your conclusions with reference to the Elk Hills would not stop this deposit of oil which you have referred to as being under the Elk Hills at that arbitrary line north of the Elk Hills, would it?

A. You mean that it extended further?

Q. Yes.

A. I think the line may be termed more or less arbitrary at the time it was made.

Q. That is, you think oil would extend further?

A. No, I don't think so.

Q. You think oil quits out there north of the Elk Hills?

A. No; I believe it extends, but at too great a depth to [467] be economically reached.

Q. We will come to that. How far do you think it extends?

A. Approximately as indicated by the blue line.

Q. Perhaps you don't understand the question. How far do you think it extends, disregarding the matter of depth?

A. I can't tell accurately, except my opinion is that it would extend so far until it is replaced by the water which, in my opinion, undoubtedly occupies the synclinal axis of the San Joaquin plain.

CROSS EXAMINATION OF F. OSKAR MARTIN.

Continued as follows, page 1260, Vol. 3:

I believe the oil territory extends practically as far north as the blue line shown on Government's Exhibit "F." Beyond that distance its depth is below 5,000 feet, which would make it not economically available. I have not determined how much farther beyond that line it extends. The geological evidence is that it does extend further.

I still maintain that it is very probable that the syncline is filled with water now. Also, at one time, it may have been filled with oil. It is my belief that the surface of that water is some distance north of the blue line mentioned above because, as I remember, the axis of the syncline of the San Joaquin Valley is a good deal more than one-half further distant from the axis of the Elk Hills anticline than the 5,000 foot limit as indicated on the map.

I believe that those parts of the stratum nearer to the axis of the anticline contain oil, and those parts of the stratum nearer to the axis of the syncline contain water. Consequently, since the distance from the 5000-foot limit as shown on Government's [468] Exhibit "F" is much smaller than the distance from the 5000-foot limit toward the synclinal axis, it is reasonable to suppose that that part from the Elk Hills' anticlinal axis toward the 5000-foot limit is filled with oil, while that part near the synclinal axis is filled with water.

Oil would always be at the highest place. Its position would depend on the relative amount of water and oil. The anticlinal axis would be occupied by oil.

Water passes more freely through the permeable bed of sand because it has not the viscosity which oil has. Oil would be more easily side-tracked.

If the supply of oil in the stratum underlying the San Joaquin Valley was not large and the water supply was considerable, it would not be possible for the anticline to be filled with water and not have any appreciable quantity of oil in it. The anticline would be filled with oil because there is where the oil would run to, and that would be the fact even if the source of oil was not immediately underneath the Elk Hills and the supply of oil were limited.

I consider the Elk Hills the most favorable place for the accumulation of oil since it is the highest, and oil and water naturally follow natural laws—the water seeks the lowest level while the oil is above the water. I maintain that the oil extends for a considerable distance north of the Elk Hills since the structure of the hills shows it to be of a more or less domelike shape and the dips are slight, and, consequently,

the whole area as far as the plain to the north of the Elk Hills must be considered a part of the Elk Hills anticline or dome.

I know from the examination of the logs of the wells drilled by the Associated Oil Company that the Elk Hills contain porous strata. As shown by the logs, it extends from 30 to 24 and 26, over the whole territory between it; because the sequence of [469] formations in the logs are similar. I have examined five logs, one of which was the log of the Hillcrest well. There was no oil in that well because they hadn't gone deep enough.

The log of the Scottish well, which I examined, did not show any oil, but that, in my opinion, is no reason why no oil should have been found there, because it was drilled from two thousand to four thousand feet with a rotary drill, which tends to mask the formation. This has been proved by operations in the field.

The logs on Section 26, 30-23 and Section 30, 30-24, as near as I remember, and the log on Section 24, 30-23, showed gas. All of the logs showed sands.

There may be some sands which are dry and contain no oil, but they would not lie in exactly the same formation and in the same stratum as the sands containing oil. If you penetrate an oil sand in one place and find oil, you will find oil when you penetrate it in another place if it is the same oil sand, even if you penetrate it a half mile or a mile or five miles away from the point where it was first penetrated. That is my experience extending over a few months in the oil field.

I do not know what Mr. Youle meant by "tight formation." I know of some formations that are impervious to the passage of oil. A place saturated with water would be impervious to the passage of oil. I say this because I can conceive of instances where, through a great fracturing, such places may become friable. An intrusion of some foreign matter into the strata would prevent the migration of oil. A fault would prevent its migration up to a certain point-up to the faulting plane. That is not uncommon in the California oil fields and not uncommon in other oil fields that I have read of. I based the conclusion that it is not uncommon in the California oil fields upon the development and upon the map I have placed in evidence; the exhibit marked "O," which shows that [470] the wells have been developed fairly continuously along certain lines. I also based this conclusion upon examinations made through the state.

I know the country in the vicinity of the Elk Hills has been subject to a considerable lateral pressure and folding and elevation and subsidence at different geological periods, but not through any faulting. There is no evidence of any faulting in the lands involved in this suit except some small faults of a few feet displacement which would not, I think, be sufficient to block the passage of oil through sand formations.

No other agencies occur to me now, which would block the passage of oil through the sand formation.

The existence of oil sands can be determined with-

670

out drilling wells; if they did not exist there would be no seepages. From the seepage found in Section 32. T. 30-24 I came to the conclusion that oil sands underlie the Elk Hills, and on account of the structural condition of the Elk Hills, they extend over all of the Elk Hills to the west of the seepage. I do not think that seepage came from a deposit of oil entirely local in that vicinity. I think this on account of the structural conditions in the Elk Hills, their anticlinal structure, their low and gentle dips, showing no fracturing. If that seep had come from what you term a local deposit, then more fracturing would be shown in the Elk Hills because experience has taught us that local deposits are found where the formation has been greatly fractured. I refer now to the Cariso Plain where oil seeps are found and wells have been drilled right near them and no oil has been found. But that is explained in my mind because the country there has been greatly fractured, and such fracturing does not exist in the Elk Hills.

The slight fracturing is the cause for the oil seep in Section 32. It is a very slight one. The uniform dip indicated that there is no fracturing in other parts of the Elk Hills. The [471] surface in Section 32 indicates a fracture or wrinkling to a somewhat greater extent than elsewhere along the anticline through the entire Elk Hills. The anticline at that particular place takes a turn to the northwest and from that I conclude that there is a crack or fracture in it at that point. There are no sharp turns in the course of the anticlinal axis at other places. The course of the anticlinal axis is more or less sinuous.

The fact that no oil seeps are found at other places where the axis of the anticline makes a turn is not any indication that there is no oil underneath. Oil would not come up in other places where there is a bend in the axis of the anticline because the fracture in such places is not so great as in Section 32.

I could not determine how great the fracture was in Section 32 on the surface. The existence of the oil seep is an indication that the fracture does exist, but as to the thickness or greatness of the fracture, I cannot answer.

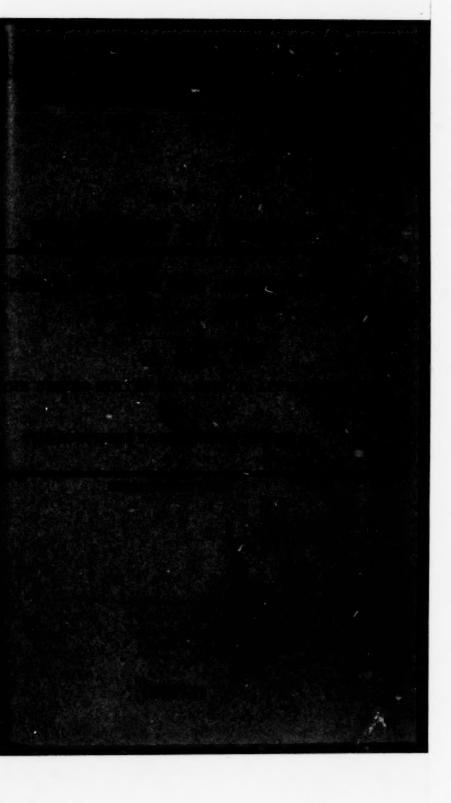
I am not speculating as to the existence of a fracture in 32; if the fracture were not there, the seepage would not be there. I would not necessarily expect to find a seepage at places where the fracture existed elsewhere; some conditions might exist whereby the oil or gas might have been prevented from ascending to the surface even in a fracture, and in this I am not referring to the absence of oil. The system of faulting might prevent the gas or oil from coming to the surface. I did not see evidences of such faulting in the Elk Hills.

The oil-producing formations referred to belong to the older or the lower part of the McKittrick formation and I believe that a very considerable period of time elapsed between the laying down of the formation which produced the oil and the deposit of the formation on top. That time might be measured by hundreds of thousands of years, and on the other hand, it took [472] hundreds of thousands of years to produce the oil, too.

The McKittrick formation is not conformable to the formation producing the oil which has been called the Monterey Formation. There is evidence there that that is a territory which, in earlier times, suffered a great deal of shifting and folding and it is possible that prior to the time of the McKittrick Formation the surface of the old formation called the Monterey formation may have revealed a very irregular formation under the Elk Hills.

It is possible that the stratum may have been upturned so that its edges were revealed. It is not possible that this earlier formation may lay horizontal with the surface because if the overlying and underlying formations have been crushed together in a fold, then the underlying formation would not be horizontal. It is generally accepted that the Monterey or Vaqueros formation created the oil or is the source of the oil. There may be a portion of that formation which is not oil-producing.

Very little oil could be obtained from the producing shale. It would be gotten in the porous formation overlying the shale. You must have a reservoir for the oil to migrate into, which must have some connection with the shale which produced the oil. The existence of a large body, more or less, of loose sand under the Elk Hills would be sufficient to warrant my advising a prospector that he could get oil in commercial quantities taking in connection the vicinity of the territory to an oil-producing and creating shale. It is not necessary that any oil creating shale immediately underlies the porous sands which will



serve as a reservoir. They may migrate for large distances into the porous sand, and, consequently, the oil creating shale may be at some distance from where the oil is later found. What you must have is a porous stratum overlaid by an impermeable stratum so that the [473] oil cannot exude to the surface. It must be confined.

In addition to the discovery of sand I would require the ascertainment of the further fact that the sand was in some way connected with oil shales somewhere in the vicinity. It is a mooted question at the present time as to how far oil will migrate, but that it does migrate has been abundantly proven in all the oil fields.

If I had oil-producing shales and a porous strata overlying them I would not want further facts to enable me, as a scientist, to advise an individual that he could obtain a paying well. The amount of the shale would have some bearing upon my opinion. It would be necessary to determine the amount of such shale to some extent.

The fact that the Monterey formation is possibly overturned or faulted would not cut any figure in the oil production. The Monterey shales are creating the oil and as long as they are overlaid with porous beds, it would not matter much in what condition the shales which create the oil are in so long as they touch the porous beds above. The condition of the shales themselves is of no importance. The greatest importance is the position of the overlying strata—the porous strata which contains the oil.

If I were advising a man with reference to irrigation, I would pay attention to the water supply and select him a reservoir site; but the same thing does not apply to oil. There is no relation between the two propositions. Your producing oil strata may all be twisted. So long as you have an overlying strata to receive the oil and an overlying impenetrable strata acting as a reservoir, that is all that is necessary.

Oil would not pass through hard shales except where terrestrial disturbances had made the shale friable so that it could get through. [474]

I think it is possible from an examination of the surface of the Elk Hills to determine that there is oil underneath them.

I agree with the statement made by Mr. Ralph Arnold on page 205 of Bulletin 406 that "It must be borne in mind, however, that absolute determination by work on the surface, of the occurrence or nonoccurrence of oil in any one locality, is not possible. The best that can be done is to calculate the degree of probability on the basis of surface indications and structural conditions?" because, after reading the entire paragraph from which this quotation is made, I think Mr. Arnold means that the occurrence or non-occurrence of oil in paying quantities in any one locality is not possible. While it is not so stated here, I infer that to be his meaning from reading the paragraph. Without that qualification I would not agree with him altogether. I do not agree with the statement made by Mr. Arnold on page 203 of the bulletin mentioned, which begins, "The conclusions here to be discussed as to the course that future development will take in the McKittrick-Sunset region," etc., because I know better from experience and Mr. Arnold knows so too, no doubt, now. He certainly keeps in touch with the oil fields and later developments have shown that he was, in some instances, wrong in his belief there.

I agree with Mr. Arnold's statement beginning on page 203 of the same bulletin: "The accumulation of the petroleum and the possibility of its extraction in commercial quantities depend on several prerequisite factors. Among these are the following, briefly stated:

"a. An adequate thickness of the shales forming the original source of the oil to yield commercial quantities of petroleum.

"b. A cause for the migration of the oil from its [475] source in the organic shales. This cause is believed to be supplied by the tendency of oil to migrate by diffusion through certain media, such as dry shales; it may be and doubtless is in certain instances augmented by hydrostatic pressure wherever water had come into contact with the petroleum.

"c. Associated porous beds occupying such a position relative to the source of the oil and to impervious barriers as to permit the petroleum to pass from the source into the final reservoir and there to be confined by impervious strata. Wet shale or clay and certain fine grained water impregnated sands are believed to be among the effective barriers to the migration of the oil.

"d. Occurrence of the accumulation at a depth far enough below the surface and distant enough from outcrops to preclude the escape of the lighter hydrocarbons, and still at depths which may be profitably reached by the drill."

All those factors existed in relation to the Elk Hills and I have now determined them. I know that the shale does exist but I did not measure any thicknesses and don't know them. In my opinion it is not necessary for any shales to underlie the Elk Hills. in the first place; the oil may have migrated into it, although I do think they underlie. There is a shale outcropping all along the eastern flank of the Temblor Range from which the oil under the Elk Hills may have come. It might migrate through the syncline lying between the Temblor Range and the Elk Hills if it is not filled with water. The oil would naturally go from the oil-producing shales into overlying sand beds, and the seepages themselves, in the Elk Hills, are evidences of a connection with the oilproducing sands.

I base my conclusion on the existence of seepages and the structural conditions of the Elk Hills.

I made an examination of the Lost Hills during the [476] the period I, was in that country and made a report recommending the withdrawal of certain lands in their vicinity. I do not have that report with me now and have no data in my possession showing exactly what lands I recommended for withdrawal in that vicinity. That report is not released by the department to which I am attached. All my reports are of a confidential nature.

A withdrawal order was issued based on that report. Inasmuch as my report was of a confidential nature I do not feel at liberty to answer the question as to whether the withdrawal order corresponded with my recommendations. I have no objection to giving the information, but since the report is confidential I do not feel at liberty to do so, and do not feel at liberty to state what land I determined was oil land in the vicinity of the Lost Hills, because, as I understand our governmental regulations I am not permitted to do so, and refuse to do so unless the Commissioner of the General Land Office releases me and orders me to give the information.

I may state that the Lost Hills and the vicinity immediately in the vicinity are oil in character and have been proven to be such.

During the period I was in the vicinity of McKittrick from 1910 until the present time, I have made several different reports. I don't remember just how many of them. I may have made five; I may have made more. I made reports of my observations with reference to oil in the Elk Hills. I decline to answer the question as to whether my reports concerning the Elk Hills contain matters with reference to which I testified here on my direct examination, unless ordered to do so by some competent authority. It is not a fact that as a representative of the government I am willing to testify when called upon by the attorneys for the government, but claim the privilege of confidential communications when questioned as to the details and [477] reasons for reaching my conclu-

sions. I have no objections to testifying as to the contents of my reports and would do so if they were released.

I cannot tell off-hand, without reference to my report or the notes on which it is based, as to how far the commercially workable oil territory extends from the summit of the Lost Hills.

I would state that the eastern half of Section 13 in Township 26 South, Range 20 East, is oil in character, but I do not think the same is true of Section 14. From my general recollections of my report I should say that Section 1 in that Township was oil in character and I consider Section 36 in Township 25, Range 20, as oil in character.

I always did believe that the northeast flank of the Lost Hills anticline would be productive to a greater extent than the southwest flank because the same conditions appear on the Coalinga anticline. The southwest flank of the Coalinga anticline is productive for a shorter distance than the northeast flank.

In the Elk Hills the dip is practically the same on both sides, having an average of between three and four degrees.

In passing upon oil lands for the purpose of determining why, in my opinion, they ought to be withdrawn, I fixed five thousand feet as the limit of the depth. I know of a well in the Kern River field that was deeper than that, but I do not know when that well was sunk. It was subsequent to 1887.

On Exhibit "O" I indicated in solid red circles the land on which oil discoveries had been made. There

was only one in Township 30-23. That was in Section 26. I don't know exactly when that well was sunk except that the drilling had been started prior to the time I had been in the Elk Hills, prior to December 1910. I have been told that it was not started until after January, 1905, and have no reason to doubt that. [478]

Exhibit "O" does not show any other wells in the Elk Hills where oil had been discovered. On Section 30, Township 30-24, oil has been discovered and the log of one of the wells on Section 24 in 30-23 indicated the discovery of gas. Those are the only two wells in the Elk Hills in which I have seen oil. I know that the well in Section 26, 30-23 has produced some oil because it is plainly visible.

The other circles on Exhibit "O," which are not solid red, are wells which have not, so far, produced any oil. In Section 20, 30-23 there are three wells which have not produced oil. They are commonly termed the wells of the Scottish Oil Company, and I have been informed that one of them is in the vicinity of four thousand feet deep. I don't know the depth of the others. They were not being operated at the time I was in the Elk Hills the last time. They were operated during several times I was there in 1911; that is, drilling was going on. They were using a rotary drill from two thousand feet down, but had used standard drills up to two thousand feet. I have been informed that they did not find any oil.

The well on Section 30 in the same township is termed the Redlands well. I am informed that they quit drilling at twelve or nineteen hundred feet. They did not find any oil. They quit too soon. I think they will find oil within four thousand feet although oil was not found on Section 20 at that depth, as I have been informed. It is my impression that they went through an oil stratum but didn't know it, because in drilling with a rotary rig the sides of the holes may be muddied up and the oil sand formation may be masked. This has happened in several instances that I know of. It happened in the K. T. & O. in the Buena Vista hills where the geologist told the drillers to pull back after they had drilled through an oil formation and didn't find it. It happened in Section 32, 31-23, to the Associated Oil [479] Company where the geologist of the company insisted that the drillers had gone through an oil sand and made them pull back and develop, in one instance, a 600 barrel well, and in another instance, a 200 barrel well, when the drillers had sworn there was no oil sand.

It is my opinion that a rotary drill should not be used in prospective territory.

I have not advised the Scottish people to pull back and find the oil. My confidential relations with the Government would not permit it.

The three wells indicated in Section 32,30-23 as dry wells, are known as the "Midway Pacific." The latest information I had as to these wells is that one of them had been sunk two thousand four hundred feet. I don't think the others were sunk. They may have been spudded in. I don't recollect now. They did not find oil as far as I know. I believe the stratum is deeper there.

The well indicated on Section 28 in the same township is termed "The Hillcrest Oil Well" and as near as I recollect, it is seventeen or eighteen hundred feet. The log on that well does not show oil but shows gas several times. They have not drilled for quite a while; quit because of lack of funds, as I was informed.

On Section 34 in the same Township four dry holes are represented on Exhibit "O." They are known as the "Maxwell" wells. I have no notes as to the depths of these wells. They cannot be of any considerable depth or I should have noted it. They were not being drilled the last time I was there.

In Section 22 of the same Township, four dry holes are noted on Exhibit "O." These are the Associated Company's wells. I do not recollect having received the logs of the wells in this section, but I believe I was informed that one of the holes there [480] is in the neighborhood of twenty-five hundred feet deep. They did not find oil as far as I know of.

In Section 26 in the same Township, three dry holes and one oil well are indicated on Exhibit "O." The Associated Oil Company claims them and has done work on them. I do not know how deep any of the three dry wells are, and to the best of my recollection, I think that none of them is over 2,000 feet.

On Section 24 of the same Township four dry wells are represented on Exhibit "O". They are the Associated Company's wells. I have been informed that one of them is in the vicinity of thirty-five hundred feet deep, as near as I can recollect now. One of the others is ninety feet and I don't

know the depth of the other two. I have been informed that they found oil in one of the wells. I am pretty sure that it is in the well in the southwest quarter. That well was not marked on Exhibit "O" for the reason that the information that they had found oil came to me since the map was made and after the map was introduced in evidence. From an examination of the log of that well I deem it very probable that oil has been found there. I have not seen it. It is found, as near as I remember, between 3100 and 3200 feet. I was not informed as to the quantity of oil found. I believe these wells are being tested at the present time.

In Section 30, 30-24, three dry wells are represented. I cannot recollect how deep they are. The best of my recollection is that they were only spudded in.

There are no wells at all in Section 32, 30-24 where I found an oil sand.

The solid red circle on Section 7, 31-24 of the Exhibit "O" is a well belonging to the Elk Hills Company. The last report I remember from that well, it was 3800 feet. My recollection is that it revealed oil; I think gas and oil.

In the flats between the Buena Vista Hills and the Elk [481] Hills, there are a number of dry wells. I have been informed that one well in Section 28, 31-24 is four thousand feet. No oil was found that I heard of.

I know where Bellridge is. The Bellridge camp or the first camp is situated in Section 33, 28-21. I know a well in Section 9 in the township south of that, sunk by the Union Oil Company. The last report I remember from that well it was 3160 feet and the log did not show any oil.

I do not know of the Gould Hill anticline.

The fact that that well had been sunk to such a depth without discovering any oil sand did not indicate to me that the overlying formation known as the "McKittrick" formation on the northeast side of the Temblor Range, was far thicker than I had estimated. A more likely reason why they had not discovered oil would be that this well, commonly called the Hopkins Joint well, lies in the syncline between the Bellridge anticline and some other anticline further to the southwest. It has not been positively proven that there is an anticline northeast of the Union Oil Company's well. I cannot state whether there is one there or not.

I am of the opinion that if the Elk Hills are valuable for anything, they are valuable for oil. I do not think they are commercially valuable for fuller's-earth. Some of the material I have found in the Elk Hills I would term "Fuller's-Earth", but in my opinion, there is not sufficient of it existing in the Hills to be commercially valuable. A great deal of what is called Fuller's-Earth in the Elk Hills is clay. I do not think that the gypsum deposits in the Elk Hills are commercially valuable.

RE-DIRECT EXAMINATION OF

F. OSKAR MARTIN [482]

Taking into consideration all of the wells in the

Elk Hills and all my information regarding that region, I am of the opinion that it is chiefly valuable for oil.

In my opinion, the fact that the land had been withdrawn by the Secretary by order of the President, had some bearing upon the abandonment of certain wells, because some of the drilling companies may have realized that by recent decisions of the Secretary of the Interior or the General Land Office the withdrawal of September 27, 1909, might be strictly enforced, and realizing that they could not get a patent to the land unless they had started development work prior to that date, that may have influenced them to abandon the work. And, in other cases, I was told, and I have no reasons to doubt, that it was a shortage of funds.

As to the relative energy with which the Associated Oil Company has prosecuted its oil operations in the Elk Hills and in other places where it is operating, I will say that from my visits to the Elk Hills and other properties of that country, they displayed less energy in the development work in the Elk Hills than they did on other holdings. Several times I have been in the Elk Hills and I have only found watchmen there and no work progressing on some of the wells.

RE-CROSS EXAMINATION OF F. OSKAR MARTIN

According to my observation, the Associated Oil Company has been more active in its operations in the Elk Hills than any other company there, and has revealed the only oil that has been found in those hills, so far as I know. I have not discovered any indications of a desire on the part of that company to bury up or conceal the oil there. They furnished me information and logs. [483]

At this time the plaintiff offered in evidence a certified copy, exemplified under the seal of the General Land Office, of the official plat of the survey of Township thirty south, Range twenty-three east, M.D.M., approved by the Surveyor General on March 19, 1856, showing the earliest surveyed portion of the Township, which was marked "Plaintiff's Exhibit P". Plaintiff also, at that time, offered in evidence certified copy of the field notes of the survey of that Township made by J. M. Duee, in 1901, which was marked "Plaintiff's Exhibit Q", and from which a general description therein was read into the record as follows:

"All that portion of Township 30 South, Range 23 East, Mount Diablo Meridian, included in this contract, is mountainous and the soil is similar throughout, being of a sandy nature, with occasionally some fine gravel and in my judgment should be termed second-class land.

"There is no timber, and the underbrush consists of low sage-brush.

"There are no springs or running water in the Township.

"There are no settlers on any of this land, but it has been used for many years as sheep pasture. "This township is situated within what is known as the Midway Mineral District, which is the name given to a district within which many successful oil wells have been developed. To the northwest is what is known as the McKittrick District, the center of which is about Sec. 18, T. 30 S., R. 22 E. To the southeast is what is known as the Sunset District, the center of which is about Sec. 7, T. 11 N., R. 23 W., and the Midway District is on the line of oil developments between the two.

"The surface of the ground in T. 30 S., R. 23 E., from the southeast corner running northwesterly shows a geological formation, with asphaltum exudations, that is regarded by experts as an almost sure indication of the presence of valuable petroleum [484] deposits.

"The land I have surveyed being more valuable for mineral than for agricultural purposes, I return the following sections as mineral land: S.E. ½ and W. ½ of Sec. 14, all of Sec. 15 and 16; E. ½ and S.W. ¼ of Sec. 17; S.W. ¼ and E. ½ of Sec. 19, all of Secs. 20-21-22-23-24-25-26-27-28 & 29; E. ½ and N.W. ¼ of Sec. 30; N.W. ¼ and E. ½ of Sec. 32 and all of Secs. 33-34-35 and 36.

"The Kern County Abstract Co. at Bakersfield has furnished me a diagram showing the mineral claims recorded on the County Records, and I find these claims represented on the ground by stakes and mounds.

"I submit herewith a list of the mineral claimants as reported by the said Abstract Company."

Plaintiff then read into the record the list referred to in the general description quoted above. [485]

A. C. Veatch, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

By Mr. Mills:

Q. Mr. Veatch, will you please state your full name and residence.

A. A. C. Veatch. My residence is Washington, D. C.

Q. Mr. Veatch, what has been your training and experience?

A. In 1897 I was assistant in charge of one section of the Indiana University Geological Survey, working in Indiana. In 1898 I was a member of the Cornell University Geological Survey of the Tertiary, working in the coastal plain from New Jersey to Mississippi. 1898 to 1900 I was assistant state Geologist of Louisiana. 1900 and 1901 assistant in charge of areal and stratigraphic geology in Cornell University summer school of field geology. 1901 and 1902, geologist Houston Oil Company, working in the Louisiana and Texas oil fields. 1902 I was appointed Professor of Geology in the State University of Louisiana, and State Geologist, which position I resigned to accept a position in the United States Geological Survey. I was with the United States Geological survey from December, 1902, until 1910. 1910 and 1911 I was engaged in work in the Trinidad and Venezuela oil fields. Generally, since my resignation from the Geological Survey, I have been engaged in work as consulting geologist.

Q. Were you, at any time while in the United States Geological Survey, chairman of the land classification board?

A. Yes; I was chairman of the coal land classification board and chairman of the oil land classification board.

Q. Did you, at any time, at the request of President Roose [486] velt, make any examination into the coal land conditions and laws and so forth of any countries besides the United States?

A. I was appointed a special commissioner to investigate the mining laws of Australia and New Zealand in 1907, and made examinations.

Q. Are you acquainted, Mr. Veatch, with the oil fields of that portion of California represented by what is known as the McKittrick and Sunset districts?

A. Yes.

Q. Do you know what has been termed, locally, as the Elk Hills?

A. Yes; I have personally visited the Elk Hills.

Q. When?

A. In February and March of this year.

Q. Will you please describe the general physical aspect of the Elk Hills?

A. The Elk Hills are an elongated group of hills extending northwest and southeast, about sixteen miles long, six or seven miles wide in the widest portion, which rise rather abruptly from the San Joaquin Valley, on the western side, to an elevation of a thousand to twelve hundred feet above the level

of the valley at that vicinity. It is separated from hills on the south, the Buena Vista Hills, by a relatively level valley, from which it rises to an elevation of five or six hundred feet from the highest portion of the valley. A comprehensive idea of the aspect of the Hills, their general relation to the San Joaquin Valley, is shown in photographs that I took at that time.

Q. Now, have you made such examination of the hills as to be able to state whether or not the general aspect, as you saw them in the early part of this year, is substantially the same, with the exception of oil derricks or works of man, as they were [487] or must have been in the year 1903 and '04, and, if so, state your reasons.

A. I should say that except for artificial changes at the hand of man, the hills are essentially in the same condition. The aspect would not vary in any material degree from what it was in 1904, for the reason that it is a region of very low rainfall and the amount of erosion that would take place in the few years between 1904 and 1912 would be very inconsiderable, entirely negligible.

Q. Now, have you made any photographs of any portions of the Elk Hills during your visits there in the early part of this year?

- A. Yes.
- Q. Have you the photographs here?
- A. Yes; I have.
- Q. I will show you this photograph. Will you tell me who took it and what it represents?

A. I took the photograph on the 1st of March of this year, the smaller negative from which this picture was enlarged. It was enlarged directly from the negative and so cannot differ in any respect.

Q. Negative made by you?

A. Yes; exposure.

Q. What does it represent?

A. This is a general view of the Elk Hills. It is a view looking southwest from the bridge over Buena Vista Slough, in Section 28, Township 29 South, Range 23 East. The relatively level San Joaquin Valley shows in the foreground, and the hills in the background. The portion of the Elk Hills shown is that portion involved in this suit and I know from examination in the hills that the lands lie on both sides of the summit shown in this picture. [488]

Q. Will you please state whether the photograph that you have in your hand is a correct picture of the conditions as you found them at the time you took that picture?

A. It is.

Mr. Mills-I offer this in evidence.

Mr. Lewers—No objection. When I say "no objection" to the introduction of any exhibit, of course I don't mean to waive any former objection which I have made.

Mr. Mills-No.

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit "S"—L.L."

Q. By Mr. Mills-Now, I hand you another pho-

tograph, Mr. Veatch. Will you state whether you made it?

A. I did.

Q. And on the same trip on which you made these other photographs?

A. Yes. This negative was exposed on March 1st, 1912. It represents the southwest portion of Section 19.

Q. Of what township and range?

A. Township 30, Range 23 East, and shows the barren, gullied character of these lands.

Q. Does that picture faithfully represent the conditions in the field at the time you took the picture?

A. It does.

Mr. Mills—This is offered—subject, I suppose, to the same possible objection.

Mr. Lewers—It may be admitted subject to our general objection. [489]

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit T-L.L."

Q. By Mr. Mills—I hand you another picture, Mr. Veatch. Will you please state who took it and what it represents?

A. I took the picture on February 22nd of this year. It represents Section 23, of Township 30 South, Range 23 East, and adjoining lands.

Q. Does the picture faithfully represent the conditions as they were in the field at the time you took the picture?

A. It does.

Mr. Mills—I offer this in evidence as government's Exhibit U.

Mr. Lewers—It may be admitted, subject to our general objections.

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit U-L.L."

Q. By Mr. Mills—I hand you another picture, Mr. Veatch. Will you please state who took that picture and what it represents?

A. I took this picture, on February 22, or the negative from which it was made. It represents portions of Sections 23, 24, and 25 of Township 30 South, Range 23 East.

Q. Does that picture faithfully represent the conditions in the field at the time you made the exposure?

A. It does.

Mr. Mills—We offer this in evidence as government's Exhibit V.

Mr. Lewers—It may be admitted, subject to our general [490] objection.

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit V-L.L."

Q. By Mr. Mills—I hand you another picture, Mr. Veatch. Will you state whether you took that picture and what it represents?

A. I did. It represents Section 25 of Township 30 South, Range 23 East, and adjoining lands.

Q. Does that picture, with the exception of the oil derricks and artificial creations of man, faithfully represent the conditions as they existed in 1903 and '04?

A. It does.

Mr. Mills—I offer this in evidence as government's Exhibit W.

Mr. Lewers—Same objection.

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit W-L.L."

Q. By Mr. Mills—I hand you another picture, Mr. Veatch. Please state whether that is the reof an exposure made by you in the Elk Hills what it represents.

A. It is. It represents the northwestern portic of Section 29 of Township 30 South, Range 23 East.

Q. And, with the exception of the derricks and buildings on the land, does it faithfully represent the conditions as existing in the Hills in 1903 and '04?

A. It does.

Mr. Mills—We offer this in evidence as government's [491] Exhibit X.

Mr. Lewers—It may be admitted, subject to our general objection.

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit X—L.L."

Q. By Mr. Mills—I hand you this picture, Mr. Veatch. Will you please state whether the picture was taken by you, and, if so, what it represents?

A. It was. It represents the central portion of Section 29, Township 30 South, Range 23 East.

Q. And, with the possible exception of the road shown on the picture, does it faithfully or substantially represent the conditions in 1903 and '04?

A. It does.

Mr. Mills—We offer this in evidence as government's Exhibit Y.

Mr. Lewers—It may be admitted, subject to our general objections.

The photograph last referred to and offered in evidence is marked "Plaintiff's Exhibit Y-L.L."

- Q. By Mr. Mills—Mr. Veatch, have you endeavored to obtain data by which to correctly depict the state of knowledge of development of this field—and by that I mean the Elk Hills and surrounding territory—including the lands in suit, in 1904?
 - A. I have.
- Q. And, as the result of this examination, the collection of the information, have you reported on the mineral value of this area as shown by evidence existing in 1904? [492]
 - A. I have.
 - Q. What is the nature of that report?
- A. In that report I endeavored to give, as concisely as possible, the simple principles which guide practical men in determining, in advance of development, the value of lands for minerals where these minerals, such as oil, occur in stratified deposits, and to show the connection of these principles with the Elk Hills territory, and, specifically, the land involved in this dispute.
- Q. I have here a report which you furnished me on March 21st of this year, and I will ask you if you recognize it as a report made to me?
 - A. It is.
 - Q. In order that the matter may be presented in

the record in concise form, I will ask you to read that report into the record.

Mr. Lewers—I object to that method of introducing the testimony. The witness is here, and if he has any testimony to give it should be given by the method of question and answer in order that we may make our necessary objections as each matter comes up, and this method of endeavoring to introduce the evidence of a witness by introducing a document which he has prepared beforehand is without sanction, and is objectionable and is objected to, on the ground that it is purely a hearsay declaration of a witness, made out of court and not made under the method provided for the taking of testimony in court. I make the further objection that we have had no opportunity to examine this report the witness is now called upon to read into the record.

Q. By Mr. Mills—I will ask you if the report you have prepared is predicated entirely upon conditions existing prior to 1904? [493]

A. It is.

Q. I think in order to get the matter presented in connected and concise form and in consideration of the fact that the report is very short, I will ask you to read it into the record.

Mr. Lewers—Will you permit me to examine the report before that is done?

Mr. Mills—Certainly. It is very short, and I simply want to have it some place in the record in concise and connected form.

Q. I will ask you, Mr. Veatch, to state, in a gen-

eral way, what your opinion was as to the conditions, in 1904, and your opinion generally upon the subject-matter of your report. You may refer to your report in any way you desire, if you care to.

Mr. Lewers—I object to that method of examination as an obvious subterfuge to avoid the objection heretofore entered; and I ask to be permitted to examine that report before that is done.

- Q. By Mr. Mills-Do you care to refer to it?
- A. No.
- Q. All right. Go on and answer the question. You may state, in cases where mineral occurs in stratified rocks, whether it is frequently possible or at all possible, from surface exposures, to determine their depth, in your exploration?

Mr. Lewers—To which we object, on the ground that the question is leading and suggestive.

A. Where minerals occur in stratified rocks, it is frequently possible to determine with exactness their extent and value and other factors important in their appraisement and development. That is the method which has been employed for many years by practical men in such subjects. Stratified [494] rocks are laid down in relatively regular layers, for the most part, beneath the sea, and are to be contrasted with other rocks formed by igneous intrusions or volcanic outpourings or which have been so altered by metamorphic action as to lose their former characteristics. The individual layers of stratified deposits can be traced for many miles, and in many cases hundreds of miles, showing to a great extent the same charac-

teristics, and it is on this regularity or irregularity as shown by the outcrop that practical men base their conclusions and have spent great sums of money in developing minerals of the kinds which occur in stratified deposits.

Q. By Mr. Mills—Now, what substances of economic importance, if any, occur in stratified rocks?

A. Among the most important are coal, water, oil and phosphate.

Q. Do these differ in any degree in the mode of occurrence from vein or lode deposits?

A. They differ very markedly from most deposits of ores, and entirely from veins or lodes, which are of very irregular character.

Q. Where stratified rocks containing coal, phosphate, oil and water are exposed at the surface by uplifting or folding and erosion, you may state whether it is possible to examine stratified beds of that character at the surface and to determine their extent.

A. It is on these exposures that the conclusion is based. The beds, after deposition, are folded up and eroded, and the effect of this erosion is to enable the geologist to examine the character of the rocks as fully and carefully as he could in an enormous trench dug through the surface of the earth. Extending for many miles it forms a much more sound basis for [495] judgment than a single development.

Q. Can you draw any analogy in that mode of study of stratified beds in the case of oil deposits with that of coal, for example?

A. Yes. They both occur in stratified deposits and are subject to much the same laws; and you can-In the case of a coal deposit, where the erosion has entirely removed the strata around a given area, you have that area rising as a hill above the surrounding region. If, in such a case, you find the coal outcropping on one side of the hill and follow that coal bed around the hill, as you can, by natural exposures, and find it goes entirely around the hill, you know absolutely that the coal underlies the hill and are justified in buying that land as coal land in the absence of any development. In a similar way, if you find a coal bed exposed on the side of a valley, dipping beneath that valley, and follow the bed around the valley, you know that the valley is underlaid with coal, and by the change of slope of the beds you can calculate the depth of that coal bed in that area which is underlaid with coal. In the case of oil or water you can follow the sand bed or other porous bed suitable for containing them, in exactly the same way as you do the coal bed. You can determine the existence of that porous strata in the same way you can determine the existence of the layer of coal, and in a similar way you can calculate the thickness or the depth of that porous bed under different portions of the territory. You follow the same method. The presence of oil or water in the porous bed can be indicated either by springs along the outcrop, in the case of water, or seepages in the case of oil, or, failing those, their presence may be demonstrated by a well or a group of wells. Such a well or group of wells, taken in connection, or such [496] seepages taken in connection, with the determinal persistence of these beds and the geological structure, warrant the development of territory in which you have not drilled. It shows the presence of the substance desired under the lands.

Q. What does the result, the value of the result, rather, of such observation depend upon?

A. It depends upon the accuracy of the observa-

Q. May a competent geologist determine the extent of an area by such observations—an area containing deposits of coal, phosphate, oil or water?

A. Yes; it is frequently done.

Q. Do you know of any illustration, in the case of underground water, for example?

A. Well, the most notable case of extensive drilling on predictions of geologists is in the case of underground waters. The United States Geological Survey has for many years been preparing reports on underground water basins, and it is one of the important services that this bureau has rendered the country, by the determination, in advance, of the drilling of the artesian basins. Notable cases are the Dakota sandstone, in North and South Dakota, the Saint Peter sandstone in Wisconsin and Illinois, and numerous cretaceous and tertiary water horizons through the Atlantic and Gulf Coastal plains.

Q. Extending how far?

A. Extending from New Jersey to Mexico.

Q. In what does oil differ from water in such determination?

A. It differs from water in this, that where water and oil [497] are both present in the porous bed, the water tends to accumulate in the lower portions of the strata or synclines, forcing the oil into the higher portions of the folds or anticlines of the strata; and it is for this reason that it is particularly important, in a new field, to determine the position of the anticlinal features. Water and oil do not always occur in the same porous strata; and, where they do not, the oil, of course, is—the synclinal is just as good as the anticlinal area, probably better.

Q. What would you say about the determinability of the extent of an area of deposition of oil, that is, by wells or groups of wells, as to the presence of

oil in synclinal areas?

A. The presence of oil in synclinal areas is a matter of doubt—there is the possibility of water in the synclines; and for that reason, in new developments the development starts along the outcrop near the seepages, that is, down the dip from the seepages, and progresses, or should progress, gradually toward the synclinal area, with the end of determining the exact limit of the water saturation, if there be any; and, in the same way, the development would start in the anticlinal areas and work down to the synclinal areas, the anticlinal being much better territory for the reason that it lacks the danger of water.

Q. You may state whether the oil value of lands not yet drilled may be demonstrated by any evidence whatever excepting by the drill?

A. I think they can, in the same way that the coal can be demonstrated by the outcrops. It is the same principle in every way. It has frequently been demonstrated in advance of the drilling.

Q. Now, in the case of the Elk Hills, have you made any [498] examination of those hills with reference to their possible oil-bearing value?

A. I have.

Q. What conclusion did you reach as to the oil character of the Elk Hills?

That they are oil land. I may say that my investigations were directed primarily to the determination of the conditions existing in 1904 and the conclusion is predicated on the evidence which existed at that time. In a general way to outline the proposition, there are a series of porous beds and associated clays which are well designed, on the one hand, to afford a reservoir for the oil, and, on the other hand, to prevent undue leakage, which may be traced for many miles along the flank of the Temblor Range, the east flank, in this case, being the important one for this question. In that area, there are seepages which have been there from the beginning, which extend for a distance of over fifteen miles, showing the persistence of the oil saturation in these porous layers.

Q. Are they exposed, at all, in any way—those beds?

A. Yes.

Q. Whereabouts?

A. They are exposed on the east flank of the Tem-

blor Range and may be followed there for a great many miles and the porous character readily determined. Now, taking this distance of seepages of fifteen miles, and which is, I may say, greater than that, but that is an area that is adjacent to this that is easily shown, it shows impregnation of oil strata extending at least seven and a half miles from a given center. Applying this distance of seven and a half miles from the outcrop, it includes the Buena Vista Hills and the Elk Hills, and the only question which could remain regarding the oil value of the territory outlined [499] in this way would be with respect to the synclinal areas, the valley lying between the Elk Hills and Buena Vista and McKittrick Hills and the valley lying between the Buena Vista Hills and the outcrop along the front of the range. Buona Vista Hills and the Elk Hills fall within the proven area from geologic determinations.

Q. Now, referring to the flanks of the Temblor Range that you have spoken of, in which way do those beds, if you know, dip, in a general way?

A. They dip, in a general way, towards the San Joaquin Valley. The general slope is interrupted by folds which are, roughly, parallel to the main fold of the axis of the Temblor Range, and, forming these folds, rise as groups of hills above the surrounding country, and their structural character is evident even to the most casual observer.

Q. What are they, broadly speaking—the evidences you refer to? Is that the Elk Hills and Buena Vista?

A. They are elongated domes of ideal structure for oil accumulation.

Q. Are there any other evidences which would in anywise corroborate the prediction of oil in the Elk Hills you have stated?

A. If any corroboration were needed with regard to the line of evidence outlined, it is found in the seepages in the Buena Vista Hills and in the Elk Hills; and any questions which might arise with regard to the persistence of the oil, as shown by these seepages, are conclusively set aside by a great series of wells which had been sunk prior to 1904 down the dip from these seepages, and connecting, showing that the seepages represented oil in commercial quantities.

Mr. Lewers—I move that all the testimony concerning wells [500] sunk before 1904 be stricken out, as it appears that is purely hearsay. The witness was not in there until 1912.

Q. By Mr. Mills—Do you know whether or not, from any public evidence accessible to you, that these seepages you have referred to have been known for any considerable period of time?

Mr. Lewers—Objected to, as calling for hearsay testimony.

Q. By Mr. Mills—Or from any exhibits in this case?

A. Yes. The seepages are shown on a number of the township plats which have been introduced. They have been testified to by a great number of witnesses. The witnesses have testified to considerably more seepages than I had to base my conclusion on. If it was possible to strengthen the conclusion, it would be strengthened by some of that evidence.

- Q. What would you say of the evidence from the geologic structure and seepages to which you have referred, along the base of the Temblor Range, as in any wise tending to form an opinion in your mind as to the oil value of the land in the Elk Hills, and particularly in the lands in suit?
- A. Well, as explained, the determination of the oil value of the lands in the Elk Hills is predicated on the seepages which occur along the flank of the range. They prove the extent of the oil-impregnated zone and in that way demonstrate the oil value of the Elk Hills.
- Q. Referring to the wells testified to by you as existing prior to 1904 along the flank of the Temblor Range, how was your knowledge of these wells gained?
- A. It was gained from various published reports, but specifically showing the exact locations and exact conditions in 1904, from the Barlow & Hill prospectus of that region which have been introduced in evidence.
 - Q. And as testified to by Mr. Hill? [501]
 - A. Yes.
 - Q. And Mr. Blodget and other witnesses ?
- A. Yes; a great number of witnesses testified to the existence of wells in there, but the specific locations of the wells shown on Exhibit I, taken from the

Barlow and Hill map, which is the most complete and comprehensive statement of those wells.

Q. Those maps to which you refer are government's Exhibits H a, b and c?

A. I think so.

Q. Now, how was your knowledge of seepages obtained?

A. It was gained from various public records, the field notes and plats of the surveys in this region, and from the affidavits and statements of persons who have since appeared and testified in this suit.

Q. Have you been present at all the sessions of the hearing of this equity suit No. 221, and have you heard the testimony of the various witnesses produced by the government?

A. I have.

Q. Now, in order to have it some place in the record, specifically, I will ask you, if you can do so, to give reference, by page numbers of the Examiner's transcript, to the testimony of the witnesses already sworn by the government, regarding seepages in this region, prior to 1904.

A. With reference to the country northwest of McKittrick, Silas Drouillard testified, page 35 of the Examiner's record in this case, he followed the seepages extending northwest from McKittrick to Carneros Spring, which is in Township 29 South, Range 20 East, fourteen miles northwest of McKittrick. Specifically, B. K. Lee, page 297, testified to dry oil sands in Sections 18, 35 and 36, in Township 29 South, Range 21 East, and F. J. Sarnow, page 233,

also knew of the sand in Section 36. [502] Nearer McKittrick, in

Township 30 South, Range 21 East, Silas Drouillard, pages 33 and 42 spoke of using the oil at the Bond Spring for doctoring stock, in 1874, and this locality is specifically described by B. K. Lee, page 296, as the tar spring in the southwest quarter of Section 12.

Township 30 South, Range 22 East, the tewnship in which McKittrick is situated, the large seepages which occur along the faulted structure south and west of the town of McKittrick or Asphalto as it was called in early days, are described by many witnesses. H. M. Shreve, who first came to this locality in 1888, page 762, says: "In various portions of 30-22, in the immediate vicinity of Mc-Kittrick there are large showings of liquid asphaltum oozing from the ground." These are likewise described by Charles Brisco, page 495, and F. J. Sarnow, page 212, Silas Drouillard, pages 62, 72 and 73, Ira M. Anderson, page 162, John Jean, page 96, H. A. Blodget, pages 607 and 609; and W. E. Youle, page 1010. Specifically, in this Township 30 South, 22 East, Silas Drouillard, pages 78 and 79 described oil sand cropping in Section 5; B. K. Lee, page 297, in Sections 8, 17, 18, 20, 28, 29, 34 and 35. The seepage near the railroad track, in Section 14, which lies on the axis of the Elk Hills anticlinal, was mentioned by Ira M. Anderson on page 188; Colon F. Whittier page 797; N. C. Farnum, page 859; F. J. Sarnow, page 210; B. K. Lee, pages 297 and 309; C. W. Lamont, page 1083, Ira M. Anderson, page 196, and N. C. Farnum, page 896, fixed the seepage at some distance from the railroad track in the hills.

Mr. Lewers—I object to this method of examination. The time has not come for the argument of this case. I object, on the ground that the witness is drawing his conclusions as to [503] the meaning of the testimony, which is a matter for the court to determine. And I move that the answer so far given be stricken out.

A. (Continuing) S. P. Wible, page 441, refers to seepages in a number of places west of the railroad track, which includes Sections 15 to 17. On page 443 he testified that he told Mr. Owen about them in 1901 and Mr. Owen said he had found others as well. Exhibit C, plat of survey of August 18, 1871, shows oil springs in Sections 20, 28 and 29, and Exhibit D the survey of November 18, 1893, shows evidence of oil and asphaltum in Sections 19, 20, 27, 28 and 29.

Q. By Mr. Lewers-What township?

A. This is all in 30-22. W. E. Youle, page 1014 described a heavy bed of asphalt, about ten feet thick, in Section 24; Ira M. Anderson, pages 162 and 163, describes asphaltum, oil sand, and gas which he lit in Section 34; Colon F. Whittier, page 799, described asphaltum along in the fault running from the northwest to the southeast and cropping very prominently in Sections 34 and 35.

Township 30 South, Range 23 East. Captain Frank Barrett, page 822 and 823, 828 describes a seepage which gave trace of oil chloroform test, in Section 17, and states, in general, that there were several seeps. This seepage in 17 is also described by J. W. Kaerth, pages 702 and 703. In Section 25, near the southwest quarter, J. W. Kearth, page 702 and 703, describes an oil seepage; and M. S. Wagy speaks of a seepage of oil sand, pages 241 and 257, which he locates as approximately in Section 26.

Township 30-24.

The seepage in Section 32 is testified to by numerous witnesses: Silas Drouillard, 31, 36, 38, 49, 53, 56, 57. [504] Mr. Drouillard says when he first saw the seepage in 1874 it was wet with oil; It was a dry seepage when he saw it in 1899. Seepages mentioned by John Jean, pages 84, 87, 88; L. G. Sarnow, 104, 106, 114; Ira M. Anderson, 167; F. J. Sarnow, 211, 222, 223, 231; M. S. Wagy, pages 235, 238, 248, 258. Mr. Wagy describes it as a dead oil sand with an odor of oil or petroleum, which burned on fire. J. I. Wagy, page 328, 331 and 336; S. P. Wible, page 434, shows that Mr. Josiah Owen knew of this place prior to 1903 or 1904. Charles Brisco, pages 496 and 497 describes it as a small brea bed, of dried oil, dried asphaltum, and states that he took Mr. Josiah Owen there in 1903. Charles Haberkern, on page 558, speaks of this as a seepage visited by Josiah Owen in August or September, 1904. W. G. Sylvester, page 583, speaks of this as a seepage which you could light and it would burn. The seepage is also described by H. P. Dover, 777, 782, who states that he made another test of it. N. C. Farnum, page 857, 858. C. W. Lamont, pages 1080 and 1081.

With reference to the Elk Hills in general, which includes the hill land in the west center of 30-22 and the south of 30-23 and south of 30-24 and the north of 31-23, 24 and 25; Ira M. Anderson, page 166, states that in numerous places he found sands which gave oil test with chloroform, in 1899. W. E. Youle, page 1020, describes oil sand; on page 1021 states that he tested it with chloroform, found the hills full of gas, burned with gas all over; page 1064 refers to oil sand which gave positive test with chloroform, and 1067 gas stained sand.

Township 31 South, Range 21 East.

Colon F. Whittier, page 799, describes a large cropping in Section 14 and an oil seepage in Section 24.

In Township 31 South, Range 22,

I. M. Anderson, pages 163-164, describes oil seepage on [505] Section 22 similar to the asphalt and oil sand in Section 34 of the township to the north. H. A. Blodget, page 609, speaks of large seepage at the head of Elk Valley, two and a half or three miles southeast of large seepage near McKittrick. Colon F. Whittier, 799, speaks of oil seepage in Section 19.

Township 31 South, Range 24 East,

F. D. Lowe, page 133, describes an oil sand in Section 1 as half a mile east of the point on Section 9 where he found an oil sand 300 yards due north of the northeast corner of Section 11. On page 133 he mentions another oil sand, one-half mile west of this point, on the section line, which would be in the central portion of Section 2. He also, on page 135,

speaks of a well drilled to the depth of 560 feet, in 1901, which contained a small showing of oil, and a gas supply, which was used for cooking.

In Township 32 South, Range 22 East,

Colon F. Whittier, page 799, speaks of seepages in Sections 1 and 2, and the seepage in Section 2 is also mentioned by B. K. Lee on page 297. On page 297 the township is erroneously stated as 31-23, but this was corrected on page 319 to 32-22.

Whereupon the further taking of testimony herein was adjourned until 2 O'clock P.M., at the same place.

On Wednesday, May 8, 1912, at 2 o'clock P.M., the further taking of testimony herein was resumed.

A. C. VEATCH,

recalled, DIRECT EXAMINATION resumed.

A. (Continuing.) With reference to

Township 32 South, Range 23 East,

Colon F. Whittier, at page 799, testified to seepage on Section [506] 6, and adds that there are several between Section 6 and Maricopa. B. K. Lee, page 297, testifies to outcroppings of oil sand on Sections 21, 22 and 26. The seepage on 26 is referred to also by Silas Drouillard, on pages 34, 25, 36 and 42. John Jean, on page 96, refers to asphaltum in the Midway region without specifying locality.

Township 32 South, Range 24 East,

The gas blow-out in Section 11 of the Buena Vista Hills is referred to by Parker Barrett, pages 946-947; by H. P. Dover, 780 and 792. B. K. Lee, page

307, refers to this as the seepage visited by Josiah Owen. On page 800, Colon F. Whittier describes a blow-out caused by oil coming up through a crevice in the formation, which he set on fire and which burned some two weeks. This is given in the transcript as Township 31-24, but should be 32-24. The seepages in the Sunset region have been testified to by several witnesses: John Jean, page 96; F. J. Sarnow, page 212, states that between Sunset and Maricopa there are some seepages extending probably two or three miles from Sunset toward McKittrick. H. A. Blodget, page 608, describes seepages and development about McKittrick in 1888 and 1889. W. E. Youle, page 1009, mentions seepages in a great many places about Sunset. H. A. Blodget, page 609, testifies to a seepage just south of the Standard line in Section 2 of Township 11 North, Range 24 West, San Bernardino Base and Meridian. Exhibit A, being the plat of survey of Township 11 North, Range 23 West, surveyed November 19, 1858, and Exhibit B. of Township 11 North, Range 24 West, approved April 29, 1874, shows several pitch springs. In general, Ira M. Anderson, page 161, states that extending generally between McKittrick and Sunset there are blow-outs, asphalt and oil, and places where you would see what was asphalt with gas coming up through the center. H. A. Blodget, page 610, states that prior to July [507] 1, 1904, there was practically a continuous field from southeast of Sunset to four or five miles northwest of McKittrick, barring a slip from what would be now Fellows to McKittrick.

- Q. By Mr. Mills—Now, Mr. Veatch, you have spoken of an opinion which you formed of the character of the lands in suit and the adjoining lands in the Elk Hills from certain seepages and from certain other physical evidences of adjoining territory, besides the geological formation of the lands themselves and their relation to these seepages. Did you have, at the time you formed that opinion, all of the seepages which you have collected and given reference to in the reporter's transcript at the time you formed that opinion?
 - A. No; only a portion of them.
- Q. Have these additional seepages tended in any way to change your opinion of the oil character of the lands in suit?
- A. No. The evidence, without the additions, was to me conclusive, and these would have strengthened it if there had been any doubt.
- Q. Referring to the seepage, or gas blow-out, in Section 32 of 30-24, what examination have you made, if any, and with what result?
- A. I examined the seepage on two occasions and found a stained sand exposed at intervals for several hundred feet, on the west side of the gulch in which it is situated, and in one or two places on the east side. This sand contains some free sulphur. Tested with chloroform it gives no oil. The sand shows some carbon—particles of carbon—and it is my conclusion that it represents an escape of gas from the oil-bear-

ing zone, the gas carrying some oil with it; that this oil has been deposited in the sand together with sulphur coming from the gas, and that it has been fired—the gas has been lit— [508] and that owing to incomplete combustion a little carbon has been left in some of the sand—which makes it probable to my mind that any one or more persens in the past could have tested that and gotten positive results of oil, if the oil had not burned out. It would probably be, also, a volatile oil, that would evaporate. If there were other earth movements, it would be possible, I think, at some future time, to get a positive test of oil.

- Q. You say the oil was probably volatile. What do you mean by that? Do you think the oil in the oil-bearing zone in that vicinity or underlying those lands is more volatile than the oil on the eastern flank of the Temblor Range?
- A. Yes; it would be more volatile in the degree that along the outcrop there has been a chance for the escape of gas, or the lighter portions of the oil, which would leave behind the heavier oil. You would thus have heavy oil near the outcrop—asphaltum at the outcrop and heavy oil in a short distance,—which would gradually grow lighter because as you get in the imbed the gases have not escaped. Now, in the Elk Hills there has been no leakage of any consequence. This slight leakage there would represent the most volatile portions of the oil.
- Q. Do you know whether or not, from your examination, there is any anticline or anticlinal structure,

in the Elk Hills running through a portion of the lands in controversy, and, if so, state the extent, so far as you have determined?

A. Yes. The Elk Hills themselves are structural hills—and by that I mean that it is an anticlinal fold, in which the present topography shows the essential shape of the fold, and that fold has a few subordinate wrinkles in it, and it is those little wrinkles in the grand uplift or fold which have been referred to as different anticlines. They are anticlinal axes of [509] minor folds. The whole hill itself is a great fold.

Q. Now, you used the words "anticlinal axis" and "anticlinal". Is there any distinction to be drawn between the two terms?

A. Why, the anticlinal axis refers to the line of the crest, the position on the surface of the exact crest or fold. Now, an anticline refers to the whole feature—not the simple line which represents the crest; and "anticlinal" is of course the adjective which describes the feature which is of the nature of an anticline. And in this case the Elk Hills is not a perfectly simple anticline, that is, there are several little wrinkles on it and it would be an anticlinal hill. Broadly speaking, the anticlinal plunges and that gives an elongated dome shape. It might be described as an elongated dome.

Q. In what direction is the strike of the anticline in the Elk Hills?

A. It is just the same as the strike of the hills themselves, which is northwest and southeast.

- Q. Are there any other evidences around this gas blow-out or oil seep described by you in 32, 30-24 in the anticlinal structure?
 - A. Yes sir.
 - Q. Please describe it?
- A. The blow-out is practically on the crest of the anticline there, that is, the little local fold, and is shown by the dips in the canyon. You go north of the seepages and the dips are to the northeast; as you go up the canyon you get dips to the southwest, in the opposite direction. That anticline there is, at that portion of the hill, the major feature.
- Q. Now, where are those dips or slopes of the anticline manifested along the Elk Hills?
- A. Well, in the gullies, where the erosion has cut slightly [510] into the strata, giving you edges and a small cross-section. Along the north slope the gullies show the dip to the northeast and on the southern slope the dips, similarly, show the dip to the Southwest.
- Q. Would you say, from the evidences which you discovered there in your observations in the Elk Hills, that the anticlinal structure is well defined or not well defined running through the hills from northwest to southeast?
- A. It, I would say, is very well defined. There could be no question whatever regarding the anticlinal nature of the hill. The exact location of the axes of some of these minor folds cannot be located, in some places, within several hundred feet, due to the very slight dip; but, so far as any practical oper-

ations are concerned, that is of no consequence at all.

Q. Have you observed any evidence of this anticline spoken of by you in Section 14 of 30-22?

A. Yes. There is an anticline that is very plainly visible there on the east side of the little gully through which the railroad passes.

Q. Are there any indications of waste, there, of oil?

A. I have seen none. I saw that anticline from the train. I didn't go over and examine it.

Q. Now, calling your attention to government's Exhibit I, with which you are familiar, having prepared it yourself, showing the state of development of this region before September, 1904, and taking into consideration this development and only that portion of the various seepages testified to by the witnesses in this case, and of which you were cognizant at the time you first formed an opinion of the character of the lands in suit, and laying out of view entirely the seepages and asphaltum reefs testified about by the witnesses Kaerth, Captain Frank Barrett [511] and M. S. Wagy as existing before that date in Township 30 South, Range 23 East, and assuming that no visible oil exposures or outcroppings existed whatever in said township at that date, and taking into consideration the geological structure of the region thereabout, would you, prior to December, 1904, have advised a company employing you to sell those lands-and by that I mean the lands in suitfor their agricultural value, and, if not, why not?

Mr. Lewers-To which we object, on the ground

that the question is a hypothetical question, based upon only a portion of the evidence in the case, and upon the further ground that as such hypothetical question it is incomplete, in that it, first, misstates the evidence in the case, and second, does not include within it all of the evidence concerning the conditions that existed prior to the issuance of the patent in this case. We object to it on the further ground that it is speculative, vague and indefinite and is calling for the conclusion of a witness as to his knowledge and belief formed at a time more than six years after the patent was issued in this case, and that for that reason it is not relevant to the determination of what was known at the time and before the time the patent was issued.

Mr. Mills—I will say, in response to that portion of the objection, that I purposely limited the question to only a portion of the evidence. There are many seeps and other indications of oil. You may answer the question.

A. Certainly not. For the reason of the great oil value of the land. The mineral value is greatly in excess of any agricultural value.

Q. You have heard it testified to in this case that one E. T. Dumble, alleged to be a geologist in the employ of the railroad company defendant in this suit, and the late Josiah [512] Owen, also alleged to be, by testimony introduced here, a geologist in the employ of the defendant railroad company, during times prior to December, 1904, were quite frequently in the vicinity of McKittrick, formerly called As-

phalto, and one, at least, of these gentlemen having made trips into the Elk Hills, would you say, or do you believe, assuming these gentlemen to be competent oil geologists, that at that time, prior to December, 1904, and at that stage of development, they could have helped knowing the oil character of the lands in suit?

A. The geologic structure of the Elk Hills is so very evident—the hill, as explained before, is a structural hill—that anyone a geologist standing at Asphalto would naturally and at once suspect the character of the fold. If that suspicion were verified by examination, as stated in your question, if the geologist had actually been on the ground, he could not have helped but know absolutely the anticlinal nature of the hill and from the development in McKittrick must certainly have regarded it as an oil proposition.

Mr. Lewers—I move that the answer be stricken out as not responsive; vague, general and indefinite.

Q. By Mr. Mills—And if your employer were not the owner of the land in this suit, would you, in 1904, with the then present stage of development, and without any exposure of oil seepage or outeroppings in the lands in suit, have advised the acquisition of these lands at a price in excess of their agricultural value?

A. Certainly.

Q. In your examination this morning, Mr. Veatch, you mentioned the line of seepages along the Temblor Range as fifteen miles and the oil horizon extending seven and a half miles eastward. Are these seepages limited in extent to fifteen miles? [513]

A. The statement of fifteen miles is an error. It is just half the distance. The actual distance is about thirty miles, and the record should be corrected to read thirty miles, on the one hand, in place of fifteen, and fifteen in place of seven and a half.

Q. By Mr. Lewers—Then your horizon would be fifteen miles?

A. Yes.

Q. By Mr. McCormick—How did you come to make that mistake this morning?

A. In my determination of the region at the time of the examination, I laid it off on a map on which the scale is approximately two miles to the inch. I measured it as fifteen inches and seven and a half inches and the note was made in inches and transposed to miles inadvertantly.

Q. By Mr. Lewers—Mr. Dumble might have done the same thing, might he not?

A. The matter is shown clearly on the exhibit. The distance of the seepages is shown there, and the matter is one of ratio rather than absolute quantity.

Q. By Mr. Mills—Now, Mr. Veatch, counsel for the defendants other than the Equitable Trust Company, in this case, at page 112 of the record, has stated in his objection to certain testimony that, "It is not a fact that petroleum is a mineral, first within the meaning of the act of Congress granting the land to the railroad that is involved in this suit, and, second, that it is not a mineral within any act of Congress or within any recognized or established meaning." Now, I will ask you whether or not petroleum

is a mineral and whether or not it is generally so regarded.

A. Petroleum certainly is a mineral. The only reason which might exist for questioning this arises from the attempt [514] of some scientists to give to the word a restricted meaning in much the same way that some scientists have attempted to give to the word "rock" an enlarged meaning. Both attempts have led to the same result. According to this enlarged definition of the word "rock," water is a rock, and should a man throw water on another he would, under this definition, be technically said to strike him with a rock. In attempting to give a scientific meaning to the word "mineral," some scientists have defined a mineral as any substance of inorganic origin of definite chemical composition occurring naturally within the earth. If this definition is followed out strictly, it would exclude everything in which organic matter has been a factor in its formation. Many deposits of iron ore will be excluded. A commercial ore is seldom of definite chemical composition and under this definition would, strictly speaking, not be a mineral, although composed of an aggregate of several minerals. Under this definition coal is not a mineral, since it is clearly of organic origin. That Congress had no such restricted definition in mind when it used the word "mineral" is shown by the fact that it found it necessary to expressly grant coal to the railroad, because under this restricted definition coal is not a mineral since coal is an organic article.

Mr. Lewers—I again object that this is not the time to argue the case.

A. (Continuing) I wish to say this is not a legal argument, but purely a scientific statement. Some petroleums are of inorganic origin, and this definition thus leads to the absurdity that in some cases petroleum would be a mineral and in others not. Both coal and oil are generally regarded by geologists to be minerals. No report on the mineral resources of a country is complete without a description of the coal and oil, if there by any, as is evidenced by the national and state [515] survey reports throughout this country and the world. The word "petroleum" is derived from "petros," a rock, and "oleum," oilthat is, rock oil-and in the early stages of its development, prior to the passage of the act of 1866, was an oil referred to as mineral oil to distinguish it from vegetable oils, such as olive oil or linseed oil, on the one hand, and animal oil, such as sperm oil on the other.

Mr. Mills-You may take the witness.

Mr. Lewers—I desire a transcript of the testimony of this witness before taking up the cross-examination; so, if you have any other witness to put on, I suggest that the cross-examination be postponed.

Mr. Mills—No; we can't go on any further, then, until you get a transcript.

Mr. Lewers—I desire at this time to have it go into the record that all of the affidavits referred to by Mr. Veatch as having been used as a basis for his forming his opinion I desire to be submitted to me for use during the cross-examination. Q. By Mr. Mills—At this time I will ask, Mr. Veatch, if you had any talk with any witnesses whatever, yourself, as to oil seepages after you read these affidavits.

A. I did.

Q. Did you talk with all of the witnesses whose affidavits you read, in forming your opinion?

A. Practically so. I certainly testified to enough— Mr. Lewers—Yes; I think you did.

A. (Continuing) I certainly talked with enough of them to warrant the opinion that I have expressed—that is, over the evidence of a sufficient number of seepages to warrant the conclusion. And, in addition, there are a number of published official reports of one kind or another which give information [516] along the same line, which I naturally went over very carefully.

Q. By Mr. Mills—Well, can you state now, Mr. Veatch, whether or not your opinion was formed by talks with witnesses regardless of any statements or affidavits which you previously read?

A. I think that in some cases I didn't talk to the witnesses before I wrote that report, but I talked with enough of them to warrant the opinion expressed.

Q. Before you made the opinion?

A. Yes; that, in connection with the corroboration of their statements by published reports and reports which relate to the field work, prior to January 1st, 1905.

Q. Then, in fact, your report is not based upon affidavits and statements?

A. It is not; that is, it is not essentially based upon the affidavits. I used some of the affidavits, but if the affidavits had not been at hand and I had simply talked with the witnesses that I did talk to and had the published reports referred to—that is, the field work prior to January 1st, 1905—I would have had sufficient data to form an opinion.

Mr. Lewers-I still want those affidavits.

A. (Continuing) I might state that the testimony which I offered this morning was not the report that has been referred to but was my opinion given after hearing all of the witnesses in court and would be based upon much more information than I had at the time that I wrote that report, which was not put in evidence.

Mr. Lewers—Still I want to know what reply will be made as to furnishing me those affidavits.

Mr. Mills—Well, in view of the witnesses's statement, I see no reason for urging the production of the affidavits, because [517] he has stated that his opinion as expressed here in evidence was made on statements made by the witnesses and that the affidavits which he read were in no wise essential to that opinion.

Mr. Lewers—That is the witness's conclusion; but in the light of certain portions of the witness's testimony which I very distinctly recollect, and in the light of certain statements made by the witness near the concluding portion of his direct examination, I still think that we are entitled to those affidavits for the purpose of cross-examination, as those affidavits certainly formed a portion of the basis for the conclusions reached by the witness under the testimony already introduced. For that reason I insist upon the demand that we be furnished with those affidavits.

On Saturday, May 11th, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed.

DIRECT EXAMINATION

OF

A. C. VEATCH

resumed,

By Mr. Mills:

Q. Mr. Veatch, on direct examination you were asked this question: "Q-Now, how was your knowledge of seepages obtained? A-It was gained from various public records, the field notes and plats of the surveys in this region, and from the affidavits and statements of persons who have since appeared and testified in this suit." Will you identify those papers I hand you and state whether or not those are the papers referred to by you, and affidavits?

A. They are. They are in addition to the verbal

statements made to me. [518]

Mr. Mills-Let the record show that the so-called affidavits referred to by the witness are now tendered to Mr. Lewers.

Mr. Lewers-I have received, at this moment, from Mr. Mills, five papers purporting to be affidavits of Charles A. Brisco, Frank D. Lowe, Bernard K. Lee, Silas G. Drouillard and J. I. Wagy.

Q. Are these the only affidavits which you considered in reaching your conclusions concerning the Elk Hills?

A. They are.

Q. Did you have in your possession, or had you examined, the affidavits of any other persons?

A. Yes. But they related to other matters, not to geologic data nor not the basis of the conclusion on the matter of seepages.

Mr. Lewers—At the conclusion of the direct examination of Mr. Veatch, you stated, Mr. Mills, that you would give me the affidavit of Mr. J. B. Treadwell. I don't find that in the papers which you have handed me, and I would like to have it produced.

Mr. Mills—That affidavit of Mr. Treadwell does not relate to seepages, and at the proper time, if it seems important to my end of the case, I shall certainly produce it.

Mr. Lewers—Have you an affidavit by Mr. J. B. Treedwell?

Mr. Mills-I have a statement from him.

Mr. Lewers-Have you an affidavit?

Mr. Mills—I don't recall just now whether he went under oath at the time that was taken or not.

Mr. Lewers—Then, when you made the statement that you had an affidavit from Mr. Treadwell, it was a statement made unadvisedly?

Mr. Mills—Well, I am not referring now to anything that the special agents may have procured from him. I refer to a [519] statement that he made to me personally.

Mr. Lewers—Then you don't know that he has ever made an affidavit, in other words?

Mr. Mills—Well, I can't say positively at this moment, but my impression is that he did.

Mr. Lewers—Which affidavit was it that you offered to deliver to me on that occasion?

Mr. McCormick—Now, I think, if you will recollect, that the statement of Mr. Mills at the adjournment the other day at the close of Mr. Veatch's direct examination, offering an affidavit of Mr. Treadwell, was more in the nature of a bit of humor or of a joke than anything else. I am sure he so intended it, and I think from your conduct at the time you understood it the same way.

Mr. Lewers—The record does not show, nor did the manner of the offer indicate, that it was intended as a joke.

Mr. McCormick—We were then discussing affidavits that Mr. Veatch had seen and examined which had had more or less effect upon his mind in producing certain testimony that he has testified to here on the stand. It was never Mr. Mills's idea, nor Mr. Veatch's either—I don't think he said anything which would justify you in considering that the Treadwell affidavit had anything to do with Mr. Veatch at all. I distinctly remember that it was, as I say, in the nature of a joke, or of the same character of talk that has pervaded a number of conversations before in this hearing.

Mr. Lewers—Then I take it you have no Treadwell

affidavit that you are willing to deliver to me? Is that correct?

Mr. McCormick—So far as I am concerned, I don't know whether we have a Treadwell affidavit or not; but if we did I would not be willing at the present time to deliver it to you. [520]

Mr. Lewers—Notwithstanding Mr. Mills's statement that he would do so?

Mr. McCormick—I am speaking for myself. Those are my sentiments.

Mr. Mills—I will ask counsel for the Southern Pacific Railroad Company whether he has recently been in conference with the witness J. B. Treadwell, since the last hearing.

Mr. Lewers—Yes. I met him yesterday on the street, and he asked me how we were getting along up here, said he had heard part of the testimony of the first expert offered for the government and that in his opinion this first expert didn't know anything about the Elk Hills. That is the extent of our conversation.

Mr. Mills—You regard that, I suppose, as a very lawyer-like piece of conduct—to testify on curbstone hearsay remark as to the testimony introduced in the case.

Mr. Lewers—Thoroughly warranted by the lawyerlike request or question made by counsel for the government.

CROSS-EXAMINATION

OF A. C. VEATCH.

By Mr. Lewers:

- Q. How old are you, Mr. Veatch?
- A. Thirty-three.
- Q. And where were you born?
- A. Evansville, Indiana.
- Q. And where did you receive your education, in a scientific way?
 - A. Indiana University. Cornell University.
- Q. And you were, were you not, a student under Dr. J. C. Branner?
 - A. Never.
- Q. Under whom were you a student of geology at the [521] Indiana University?
 - A. J. F. Newsome.
 - Q. Where is J. F. Newsome now?
- A. He is engaged in private work. He has a residence at Palo Alto; and I don't know where he is at the present moment.
- Q. And he was connected for a number of years with the department of geology at the Stanford University under Dr. Branner, was he not?
 - A. Yes sir.
- Q. And resigned that position to go into private practice in 1908 or 1909, did he not?
 - A. I don't know as to the date.
- Q. But he is now engaged in the private practice as a consulting geologist?
 - A. So I understand.
- Q. Do you know whether he had ever made any examination of the Elk Hills?
 - A. No; I do not.

- Q. And when you went to Cornell, under whom did you study geology?
- A. Professor G. B. Harris, Professor A. C. Dill and Professor R. S. Tarr.
- Q. And was your course at Cornell a postgraduate course?
- A. No; I had never received the degree. My course at Cornell-I was in the geological seminary, and in that respect was taking postgraduate work, supposed to be restricted to postgraduate students. I may say that with reference to my work in Indiana, I did original field work before I went to the Indiana University, and my meeting with Professor Newsome was purely accidental in many ways. I was intending to do some science work under Professor Eigenmann and happened to step into [522] the geologic department and showed Professor Newsome my results in Southern Indiana. That was before I had ever been in the university in geology. And he asked me to take charge of a section in field work. That was my beginning in geology under Professor Newsome
- Q. That is, the charge of the section of students who were doing preliminary or elementary field work?
- A. My assistant was a senior in geology in the university.
- Q. Now, how long did you continue with that work, or with your work in other respects at the Indiana University?
 - A. I was on that summer school work, that is, the

Indiana University geological survey, the following fall. And I may say the year preceding that I was teaching physical geology, physics and mathematics in the high school, and I continued teaching that fall and met Professor Newsome again at Indianapolis, at Christmas time, and I read a paper before the Indiana-Academy of Science, and he then offered me work in the laboratory there at the Indiana University which would give me sufficient funds to pay my expenses. I unfortunately did not have the money to go to college. And I then resigned my position in the high school at Rockford, Indiana, and was engaged in the laboratory there that spring. Professor Tarr, at Cornell, wanted some special work done which paid more than the Indiana University, and I thereupon went to Cornell, finding in that way a method to make my way through college. At Cornell, under Professor Tarr, I met Professor Harris and Professor Harris then asked me to go on the Cornell geological survey of the Tertiary. That was in the summer of 1898; and the request coming to him in the fall of 1898 to recommend a man that was competent to take charge of the field work in the Louisiana geological survey, he recommended me. I thereupon became assistant state geologist of Louisiana. [523]

- Q. Then how long were you in Cornell in all?
- A. At that time I was there three months.
- Q. In all, though?
- A. Altogether, about two years and a half.
- Q. And when did you return to Cornell?
- A. I returned to Cornell in 1900.

- Q. And what position did you have at Cornell on your return?
- A. I was assistant in charge of areal and stratigraphic geology in the summer school of field geology.
 - Q. What is areal geology?
- A. It is the making of maps, showing the surface areas occasioned by formation.
 - Q. It is not "aerial" then?
- A. No; it is not "aerial." Incorrectly stated in the transcript.
- Q. And that work in Louisiana prior to your return to Cornell, consisted of what?
- A. General examination of the geology of the state and of special areas. There are a number of rather voluminous reports covering that. There is a report of the geological survey of Louisiana for 1899, in which there is a joint paper by Professor Harris and myself on the historical development of the geology of Louisiana and on the general topography of Louisiana. There are detail papers by myself on the Five Islands, which are peculiar uplifts in Southern Louisiana, of the same character in which the oil is found; and in a detailed report on the Freeport area, the northern part of Louisiana, various papers of considerable volume. And the second year's work is represented by another volume which was published in 1902. I may say that on my return to Cornell credit was asked for that [524] original field work, and produced a long faculty wrangle, in which part of the faculty held that a baccalaureate degree meant four years' residence in a college and therefore

this could not be counted on the baccalaureate degree, and the conclusion reached finally was that as soon as I got a baccalaureate degree they would credit me with two and a half years on a doctor's degree, that is, permit me to get a bachelor's degree and doctor's degree at the same time.

Q. Well, did you obtain those degrees?

A. No.

Q. Now, in your work during those two years in Louisiana, did you have any field work in connection with oil deposits?

A. No. There are some deposits of oil on some of those Five Islands in Southern Louisiana.

Q. Did you examine them?

A. Yes.

Q. And were they being developed?

A. No.

Q. No practical drilling operations going on?

A. No. There was drilling over near Calcasieu, near the sulphur mine, Sulphur City, which was yielding some oil. I made an examination there.

Q. Well, did you make extensive examination or detailed examination?

A. No; not at Sulphur City. I did at Belle Isle. That is one of the Five Islands.

Q. That is the place, though, where no development had taken place?

A. No; none.

Q. Has any taken place since?

A. There has been drilling; yes. [525]

Q. Any oil found?

A. No; not in commercial quantities.

Q. And you came to the conclusion that it could not be found in commercial quantities there, did you?

A. Yes. The dome there is lifted to the surface and the top is eroded, and you have, as at Beaumont, a central core of salt over which there is a mass of more or less porous gypsum, which contains the oil, and at Belle Isle the uplift is such that that porous cap is eroded and you get a few oil springs along the side, so that the oil has escaped so that there is no large quantity of oil there. At Beaumont it is deeply buried and the top of the dome is not broken.

Q. That is, the oil formation that you found in Louisiana was due to intrusions of salt dikes or dips, was it not?

A. Was due to them?

Q. That is, the formation itself.

A. That is, the deformation there is due to the salt.

Q. And the same thing was true in Texas, was it not?

A. It is, at Beaumont.

Q. Have you any knowledge of any such condition in the formations in California?

A. No.

Q. In what formations, as to their geological period, does the oil occur in Louisiana?

A. It ranges from cretaceous to relatively recent.

Q. About how recent?

A. Why, of the Pliocene and Pleistocene.

Q. Well, do you mean that you find the forma-

tions from which oil is derived as late as the Pleistocene in Louisiana?

A. Find the oil contained in it.

Q. I am not referring to the formations which serve as an [526] oil reservoir, but to the oil-producing formations, the derivative formations.

A. Well, I don't know what is the oil-producing formations in Louisiana and Texas. I wish I did. I only know about the oil-containing reservoirs there. What the source of that oil is I don't know.

Q. It is generally believed, is it not, both in Louisiana and Texas, that the oil-producing formation, derivative formation, is very much older than the oil derivative formations in California?

A. Not very much older. They are, considering the whole geologic time, very close together.

Q. Well, is it not generally believed that they belong to the cretaceous period?

A. Yes, I believe that the source is from the cretaceous.

Q. While those in California belong to the later periods in the Tertiary, do they not?

A. It is generally so considered. But the matter of the age of the source of the oil has no bearing on the economic development of an oil property.

Q. That is your point?

A. Yes. If you take a region, it does not make any difference whether your oil is coming from a cretaceous horizon or a Tertiary horizon; if you have a porous bed which contains oil and you can determine the structural position of that porous bed and there is evidence that that porous bed contains oil, the age of that bed does not affect the question of whether you get oil or not.

- Q. Does it affect the question of how much oil you will get?
 - A. Not necessarily.
 - Q. Not necessarily; but it may? [527]
- A. It may. The conditions in California are peculiarly favorable. That is, regarding the diatomaceous shale as the source of the oil, you can demonstrate the matter very fully and very conclusively.
- Q. Well, I shall come to the California conditions in detail later.
- A. Let me explain a moment. You take this condition, which happened in some South American work. A man is placed in a region, and the age of the rocks is of scientific interest. But where you find a shale, as I found there, you don't care what the age of that shale is; it does not make any difference for this particular matter of determination of the oil horizon. And you find below that shale a porous recent formation which contains oil in quantities, and you find that porous recent formation in a great many places; you determine the structure and you find that these occur in certain relation to the anticlines, and it shows very fully that those anticlines are excellent oil territory. Now, this happens to be lower cretaceous, but that does not make any difference; that was simply a scientific determination which was of scientific interest. It was of no economic value in that particular development.

Q. Then, in your opinion, so far as determining the occurrence of oil and the quantity of oil that can be developed, it makes no difference whether it is in an old formation or a comparatively recent one? Is that correct?

A. That could be broadly stated in that way. Oil occurs in practically all formations, all periods, except the very oldest—certainly a great deal older than anything in California. It is a matter of physical conditions.

Q. After you had completed your work in Louisiana and returned to Cornell, what was the next occupation that you [528] followed?

A. I went to Texas.

Q. When?

A. In 1901.

Q. And what position did you hold in Texas?

A. I was geologist with the Houston Oil Company.

Q. For how long a period?

A. Oh, eight or nine months. Less than a year.

Q. During that period what were you doing?

A. I was making investigations of the structure of the region—general region of eastern Texas and western Louisiana.

Q. What amount of territory did you cover in

your examination?

A. Well, it covered different places in the area extending over the eastern quarter of Texas and occasional trips into western Louisiana. I was employed there specially because of my detailed knowl-

edge of the stratigraphy in Louisiana. It was a matter of stratigraphic geology. The training of a person in stratigraphic lines bears on his competency to determine the oil formations.

Q. I was not asking as to your competency; I was asking what you did in Texas, what territory you examined in Texas.

A. It was various portions of the eastern quarter of Texas.

Q. For what purpose?

A. For the determination of the oil value of the land, for the special information of my immediate chief there as to the geological relations, formations, in there.

Q. Did you have charge, in any way, during that period, of any actual oil development?

A. No.

Q. Did you locate any wells?

A. No. [529]

Q. And did you have anything to do with the sinking of any wells?

A. No.

Q. Did you examine well logs?

A. Yes; a great many of them.

Q. For the purpose of determining the strata?

A. Yes.

Q. But you were not connected with the practical end or operating end of the oil business during that period?

A. No.

Q. Your work, then, was a general geological

investigation of conditions in various portions of Texas, was it?

A. Yes, with detailed investigations in certain localities.

Q. And did you, during those investigations or as the result of them, denote any territory that in your opinion should be developed?

A. Yes.

Q. In how many places did you indicate what you regarded as profitable oil territory?

A. I did in only one.

Q. And where was that?

A. That was over in Louisiana.

Q. You located none, then, in Texas?

A. No. There were a great many wells there in Texas. I advised the drilling of wells near Saratoga.

Q. In Texas?

A. Yes.

Q. Were those wells drilled?

A. I think so.

Q. Do you know?

A. I do not.

Q. Do you know whether they were profitable or not? [530]

A. I have heard they were.

Q. But you took no part in it?

A. No. I left before the work was completed.

Q. Did you advise as to the depth which they should be drilled?

A. No. That is not possible in Texas because of the geologic conditions. In certain regions your geologic conditions are such that your geologist cannot form an idea.

- Q. So, in Texas, where your examinations were made, it was impossible to determine the depth to which the well should go, was it?
 - A. Yes sir.
- Q. What was the reason for that in that particular place?
- A. The reason for that is that the sub-structure of the coastal plain of Louisiana and Texas is very irregular and it is masked by a series of very recent deposits which entirely masks the underlying geology. In that respect it differs entirely from the California conditions.
- Q. That is, in California there are no overlying deposits which mask the underlying formations?
 - A. Not in the way they do in Louisiana and Texas.
- Q. In not quite the same way, but there are overlying deposits in California which mask the underlying formations, are there not?
- A. Not in the way to influence your judgment, that is, to make it impossible to reach a definite conclusion.
- Q. That is, you say that in California, notwithstanding these overlying deposits which occur in many places, you can still reach a definite conclusion as to the underlying formations?
- A. Yes. I think that it is definite enough to warrant drilling.
- Q. Well, are you using that term "definite" in its scientific [531] sense or as meaning something that you can guess at?

A. I mean an approximation, reasonable approximation which is the basis of commercial development.

Q. That is, a "reasonable approximation"?

A. Yes.

Q. Then you don't mean that you can definitely locate and determine the position or the condition of the underlying formations in California?

A. You can in some cases.

Q. "In some cases"?

A. Yes sir.

Q. Where they are exposed?

A. Yes.

Q. Or where wells have been sunk through it?

A. It is your geologic exposures, and I have never seen a region in which the geologic exposures are as complete and satisfactory in a great many ways as in these California oil fields.

Q. Well, we will come to that, and find out how much you have seen of that. And that was the extent of your practical experience in Texas and Louisiana?

A. Yes.

Q. Then, after that where did you go?

A. I was at Cornell for a short period of time, assisting in the preparation of a report on a portion of Louisiana, and then I returned to Louisiana as Professor of Geology in the state university.

Q. And how long did you continue there?

A. I was there about three or four months.

Q. And resigned?

A. Yes.

Q. And where did you go then? [532]

A. I was working for the United States Geological Survey in northern Louisiana and southern Arkansas.

Q. In what capacity?

A. As a geologist investigating underground water reservoirs. And at that time I located the Caddo oil territory.

Q. Where?

A. Northwestern Louisiana.

Q. And that was in what year?

A. 1902.

Q. And you at that time had some practical experience, did you, in the sinking of wells?

A. No purely geologic. It was my deduction regarding the presence of oil there.

Q. Your location of the oil area at the Caddo field, then, was purely a geologic matter based on structure?

A. In that region in northern Louisiana the structure is much better exposed than it is in southern Louisiana; and they have in there analogous domes, structurally, to those which occur in southern Louisiana, where the surface exposures are such that you can work out the structure. It is not buried by a great mass of deposits, and I found there a case of a dome of which the top had been eroded and represented a place where they could drill for oil or gas. There are two or three domes in that region where the top is entirely gone and the oil has leaked and dissipated, and those I do not consider favorable sites.

Q. And were you the pioneer in that district?

A. I sank no wells there. I recommended the sinking of them.

Q. To whom did you recommend it?

A. To Mr. Glassell.

Q. And did he sink wells there?

A. Yes. [533]

Q. And they were profitable?

A. Yes.

Q. And no wells had been sunk in that vicinity before that time?

A. None at all. That was not thought of as an oil territory.

Q. Until you came in there and saw it?

A. So far as I know.

Q. Well, were not these features of the landscape, the surface indications, and so on, plainly visible for miles?

A. No. The geology there requires very careful work. It differs in that respect very greatly, I think, from your California conditions.

Q. And it was not obvious to anyone except a highly trained specialist in geology?

A. I think so.

Q. And that is the reason why you felt that you were able to discover it and that accounts for your success in that particular instance, is it?

A. Yes.

Q. The dome-like structure that you have referred to was not visible from the surface?

A. Well, it is at the surface, but the exposures are

such that it requires very detailed, careful work to determine it. That is, I mean it was not plainly visible to a man ordinarily walking over it. It would require a geologist—not a casual view of it, but very careful detailed work. It does not stand out, stare you in the face, as the geology does in a great part of the western United States.

Q. And after you had made a careful and detailed examination of the surface, you were able to say in your own mind, were you, that you knew absolutely that underneath that dome was oil [534] in paying quantities?

A. No; not at all.

Q. Then what conclusion did you reach?

A. I reached the conclusion that that was to me valuable oil land, that is, it had a commercial value as oil property.

Q. What do you mean by that?

A. Because of the very great probability of oil occurring there. It is not possible to say certainly that there is oil there, that is, there is oil in commercial quantities. If there is oil in this region, it certainly occurs in that locality, and that is a place where I would certainly advise drilling and where a man would be amply justified in spending money in drilling a well.

Q. That is, you came to the conclusion that if there was oil in that territory, that was the place where it would be found?

A. Yes; and I felt that there probably was oil.

- Q. Still, you recognized, didn't you, that the "if" was necessary?
 - A. Yes. There were no seepages there.
- Q. And you would, from the surface indications which you found there and as the result of your careful examination, feel justified in advising an oil operator to prospect that territory?
 - A. Yes.
 - Q. In the hope of developing an oil well?
 - A. Yes.
- Q. That is, you thought it was a good prospecting ground, didn't you?
 - A. Yes; very excellent ground.
- Q. And you would not have been greatly surprised, would you, if he had failed to find oil in paying quantities?
- A. Yes. I would have been rather surprised if he hadn't got [535] oil or gas.
 - Q. But I mean in paying quantities.
 - A. I can't say "in paying quantities."
- Q. That is, the failure to get it in paying quantities would not have surprised you, as a scientific proposition?
 - A. No; not from the evidence that existed there.
- Q. That is, you realized in advising the prospecting of that particular territory, that there was a chance that oil would be obtained?
 - A. Yes.
- Q. And you also realized, did you not, that even if it were obtained, it might not be in sufficient quantities to warrant the expense of sinking for it?

A. Yes; there is a chance of failure in all business operations.

Q. And in mining operations of any kind that chance of failure is perhaps greater than it is in many other forms of business enterprise, is it not?

A. Well, with certain conditions in coal and oil I don't think they are any greater.

Q. You think that with coal and oil it is practically a cinch, is it?

A. That is, it offers a greater chance of return than any metal mining, and the danger of failure there is no greater than in a great many business operations.

Q. That is, there are many business operations which are essentially, in their nature, gambles?

A. No-that is, unless you include everything.

Q. Well, I do include everything.

A. Now, to illustrate, when I was in the high school I was once employed by a large produce house as stenographer and bookkeeper, and what not, or assistant, and I frequently remember [536] of the company buying potatoes and the price of potatoes went down and they lost money on those potatoes. When they bought those potatoes they must reasonably have felt sure they were going to make money on them; but there was a reasonable business risk, it was a good business prospect to buy those potatoes.

Q. Your employers were the kind that would not take a chance but were betting on a sure thing?

A. No; it was a commercial proposition. You needed potatoes and bought potatoes according to

your very best information, to the best advantage in the market. If you lost your guess on that you lost on the sale of the potatoes.

Q. Did you ever know of your employers, during that period, endeavoring to buy potatoes at some place and discovering there were not any there?

A. Endeavoring to buy potatoes—

Q. —at some particular place and discovering that there were no potatoes there?

A. I don't know that I have.

Q. Fould not that be more nearly a parallel with your oil venture?

A. No; I don't think it would. It is a business risk.

Q. When they bought those potatoes, they knew there were potatoes, didn't they?

A. Yes; and when a man takes, on the advice of a competent geologist, oil land, he has a reasonable prospect of success.

Q. And a fair chance of failure?

A. As he does with the potatoes.

Q. Just as, if he bought the crop of potatoes to be raised upon a particular piece of ground two years hence, he would have a reasonable prospect of getting his potatoes and a fair chance of their never being planted?

A. Yes. There brings in an important element, of the com[537] petency of the man who plants the potato crop, in which I think you will find another

parallel.

Q. And in neither case would it be a certainty?

A. No; no. A man can secure another to get potato land, but he can't guarantee to the man who buys it that he will get a good crop of potatoes off of it. That is, he cannot if he is an honest man.

Q. Nor can be guarantee that there will be a valuable crop of potatoes on that land the next year?

A. No; but it is a good business proposition to buy it.

Q. In other words, it is good business to take a chance?

A. You take a chance in any business, practically.

Q. Now, did you locate any other oil property in either Louisiana or Texas after you were Professor of Geology of Louisiana?

A. No.

Q. Then your next experience, in the practical way, was in South America, was it?

A. All my work on the geological survey was in stratigraphic geology, and that is the essence of the determination from the geologic standpoint of the matter of oil.

Q. But I am asking you where your next practical experience where you were hunting for oil for somebody was.

A. If you will pardon me a moment, that work was primarily in underground water.

Q. I am asking for oil.

A. Yes; I am coming to that. In coal and in oil in Wyoming.

Q. Were you employed by any individual during your Wyoming work?

A. Oh, no; I was in the employ of the government.

Q. But the question is, where was your next practical work in the oil fields as a representative of any person interested in [538] the development?

A. It was necessarily after I left the Geological Survey, because I could not—

Q. Well, when was it and where was it?

A. In Trinidad and Venezuela.

Q. In connection with oil?

A. Yes.

Q. And during how long a period were you there?

A. About a year.

Q. And you were employed by whom?

A. By the General Asphalt Company.

Q. And did you, during that period, locate any wells?

A. Yes.

Q. And did you have any experience with the practical drilling of those wells?

A. No.

Q. That was in charge of other persons?

A. Yes.

Q. And what depth were those wells?

A. Those were all under fifteen hundred feet.

Q. And those were successful?

A. No; not altogether.

Q. Why not?

A. In one case the drillers reported no oil at all, and the oil commenced to flow, subsequently, between the ten and twelve inch easing at the rate of about two thousand barrels per day but it choked in there from sand. There was a case in which the driller had passed the sand entirely. That well has never been finished to production, so far as I know but that is a mechanical feature which I don't pretend to know anything about.

Q. And that indicated the discovery of oil at what depth?

A. That was down about seven hundred feet. [539]

Q. They had gone by it?

A. Yes.

Q. Now, how about the other wells?

A. The other wells, they struck a large oil sand and succeeded in flooding the well with water from above, flooding the oil sand. It is a whole series of bad mechanical features of well drilling.

Q. Still, that could be corrected couldn't it?

A. That I don't know.

Q. It could have been prevented, could it not?

A. I think so.

Q. Well, was there a sufficient test to determine whether that oil sand they struck was productive?

A. Yes.

Q. In large quantities?

A. That was the opinion of the drillers, I mean.

Q. How deep was it?

A. It was about eight hundred feet.

Q. And the water came in and flooded that entire bed of oil sand, did it?

A. No; I don't believe that it did.

Q. Well, what did the water do?

- A. It flooded in that well so that you had an emulsion in that well.
- Q. Well, I mean the bed exposed in that well was flooded, was it?
 - A. Yes.
 - Q. And the well was abandoned, was it?
 - A. No; they were working on it the last I knew.
- Q. That accounts for two of those wells. Were there any really successful wells?
 - A. No. [540]
 - Q. What was the matter with the rest of them?
 - A. All mechanical difficulties with the sand.
 - Q. With all the rest of them?
 - A. Yes.
- Q. Now, had you advised the persons who employed you that these dangers would be likely to be met with?
- A. I advised them not to use a rotary, which was used in a number of cases.
- Q. And did you advise them of the danger of flooding?
 - A. Yes.
 - Q. And they disregarded your advice?
- A. That is a matter purely with the driller. The man who has charge of the actual drilling may be given all the directions possible, and yet that don't control absolutely his operations.
 - Q. Well, how many of those wells were flooded?
 - A. That one I spoke of was flooded.
 - Q. Is that the only one?
 - A. Yes.

- Q. How many wells were there in all?
- A. I advised regarding the sinking of four or five wells.
 - Q. And they did start the four or five wells?
 - A. Yes.
- Q. Now, one of them went too deep, one was flooded. What became of the other three?
- A. Two of them got very large supplies of gas, in commercial quantities.
 - Q. But not oil?
 - A. Not oil.
 - Q. Now, how about the other one?
- A. And the other one produced for four or five months and then the well choked with the sand. That is a matter of [541] mechanical difficulties that I think can be overcome.
 - Q. Was the gas a matter of mechanical difficulty?
 - A. No.
 - Q. How deep were the gas wells?
- A. They got the gas at about six or seven hundred feet.
 - Q. Did they make any effort to go beyond?
- A. They were when I left. I think there is oil below them.
- Q. How deep did you advise them to go eventually?
- A. I advised them not to go any deeper than 1500 feet in that territory.
 - Q. Why did you give them that advice?
- A. Because of the geologic structure of the region. There is a series of irregular oil sands there

which occur through a whole series of beds about 1500 feet thick and when you reach the bottom of that series I thought at the place they were drilling it was not advisable to go deeper. There are some lower oil sands there which are not so persistent.

Q. How do you know the depth of that formation that you have referred to?

- A. From calculation of the surface outcroppings.
- Q. There were no wells there at all?
- A. No.
- Q. In the vicinity?
- A. No well which was a factor. There was one well there which was about 1200 feet.
 - Q. Was that producing?
 - A. That was producing.
 - Q. And did you have a log of that well?
 - A. None that was reliable.
 - Q. You had a log of it?
 - A. Yes; I had a log of it. [542]
 - Q. And you used that partially as a basis of your determination, did you not?
 - A. No.
 - Q. Why not?

A. Because of the entire inaccuracy of the log so far as I could determine. It was not a good log. And the exposures in the surrounding country were such that you could calculate your thickness there beyond any doubt at all. With a detailed survey there of the whole area the thickness was calculated from three or four different directions by the dip of the rock and all those calculations came within 50 or 60 feet of

each other, which is, I think, definite. To have a 1500-foot strata and your thickness be within 50 feet of that I would call that an accurate determination.

- Q. And when you went there there was no oil discovery in that vicinity?
 - A. There was one well.
 - Q. And that was producing?
 - A. Yes.
- Q. So that you had the factor of the operation of the drill determined, did you not?
 - A. Of that well.
- Q. That is to say, the well was there and that factor was determined?
- A. Yes, the well was there but without that well we could reach the same conclusion.
- Q. Well, I am not interested in your conjecture as to what conclusion you would have reached; I am asking you for the data that you had at hand.
- A. There is at that place one of the largest seepages in the world.
- Q. Was this anywhere in the vicinity of the asphalt seepages? [543]
 - A. Yes; right near it, right at it.
- Q. Now, in that connection, is there any coal there?
 - A. No, not in that vicinity.
 - Q. Is there any coal near the Trinidad asphalt?
 - A. That is the asphalt I am talking of.
 - Q. There is no coal in that vicinity, you say?
- A. No. There is a little impure lignite in one or two places.

- Q. Is there not a fair quality of bituminous coal there?
 - A. No.
 - Q. Not anywhere in the vicinity?
 - A. No.
- Q. Is it not a fact that near the Trinidad Asphalt Lake, commonly called by that name—
 - A. Yes.
- Q. —there is a deposit of a fair grade of bituminous coal—
 - A. No; there is not.
- Q. Just a moment. —running into the same formation, and practically into the asphalt itself, giving every indication of being continuous with the asphalt?
 - A. No.
 - Q. You are quite positive of that?
- A. Yes; absolutely. I made the most detailed investigation of that region that has been made. I know absolutely what is there. There is, in one little gully about three miles from the lake, a thin layer of very impure lignite two or three feet thick. It is really simply a black clay. There is more clay and sand in it than any carbonaceous matter. Now, that little deposit plays out within half a mile, and the same horizon, along the coast, is shown by very little stringers. There is nothing there more than three or four feet of bituminous clay. It could not [544] in any place be called a lignite, and that is a far cry from bituminous coal.
 - Q. Are you acquainted with an English writer,

a geologist in the oil fields, by the name of A. Bebe Thompson?

A. I have never met him. I know some of his works.

Q. He has made some investigation, has he not, of the Trinidad asphalt depositions?

A. I understand so. He has made some detailed investigations down the coast a little way from that.

Q. When you left Venezuela where did you go?

A. I went to Washington.

Q. And resumed your connection with the Government Geological Department?

A. No.

Q. Were you connected with that while you were in Trinidad?

A. I was on the per diem roll that is, I asked to be relieved and it was suggested that inasmuch as my private work was not in the United States I be put on the per diem roll, that that would not conflict with the regulations, that is, employment whenever employed; and when I returned that last connection was severed.

Q. What do you mean by the "per diem roll"?

A. On the survey there are what are known as annual appointments, that is, appointments which yield a yearly salary. Then there are per diem appointments, which maintain your civil service status without actual employment by the government; your compensation is stated as so much per day when actually employed. Now, you can hold such an appointment as that for years and years and never do

a lick of work for the government. It simply maintains your civil service status.

Q. A very convenient arrangement to allow private employment, is it not? [545]

A. Outside of this country. It does not allow it in this country. It was formerly used, as a great many of the per diem appointees did private work in this country up until two or three years ago, that is, up until the time of the present Director of the Survey, and he held that that was in violation of the spirit of the act creating the Geological Survey, which practically prohibits private work in the United States, and he called upon all those per diem people to either declare that they would not do private work in the United States or to resign, and the great majority of them resigned.

Q. Now, it was before you went to South America that you made your examination for the government

of certain oil lands in Wyoming, was it not?

A. Yes.

Q. And you have embodied the results of that examination in what is known as Professional Paper No. 56, have you not?

A. Yes.

Q. Now, during that examination, did you determine the location of any wells?

A. No.

Did you predict the discovery of oil in any given areas?

I said I thought a large area would eventually prove to be oil-bearing in small quantities. The conditions there are such that you will get only small wells. The oil accumulates in small sandstone lenses in the shale which produces it and it is a matter of hitting those lenses and when you do hit them you will get small wells. Now, that territory, of that character, which is not a particularly good oil proposition, extends for a great many miles through that country and is evidenced by a number of seepages. That belt is 200 miles long, probably, and I expect to see that country developed some day to an extensive field.

Q. But so far it has not proved a productive field? [546]

A. There is a small production there. The disadvantage of operating at that point is that it lies in the center of the continent, it is dependent entirely upon the good graces of the Union Pacific and the Southern Pacific to get to the coast; and the cost of shipping, cost of transportation, is such that it is not an attractive field in any way.

Q. There is no immediate market for the oil there?

A. No, that is a sparsely settled region. There has a small refinery been erected there and they are producing some oil, after long and painful negotiations, I am informed, with the railroad.

Q. In fact, you feel that the attitude of the railroad in connection with that oil country in Wyoming has been entirely unfair?

A. No, not entirely so, that is, the distance is very great and the cost of hauling would be very great, so

that on the point of the lowered cost of charge it is fair, but on the point that they can ship from New York to San Francisco by rail cheaper than from Evanston, Wyoming, by rail is unfair.

Q. And you have also the full conviction that the railroad, the Union Pacific in particular, was unfair to the early locators in there on that oil territory?

A. No; I only know of one case, the case of one section, at Spring Valley, in which there was both coal and oil. Oil was discovered on the land before the land was patented, and the question then, since coal was given to the railroad, was to me simply one of relative worth—whether it was worth more for coal or for oil—and I think that particular tract is worth more for coal than it is for oil.

Q. Did you think so at the time?

A. Yes.

Q. There was a contest, was there not?

A. Yes. [547]

Q. In which you were interested to determine-

A. No; that contest occurred—I knew nothing about it—I read the record of the contest after the contest was over.

Q. And did it not occur to you that the failure to develop the oil territory in portions of Wyoming was due to the discrimination of the railroad in making it expensive to bring in supplies to the oil drillers?

A. Yes, that was the common report in there, and there seemed to me, from what I could learn at that time, to be something in it. I didn't go into it exhaustively.

- Q. You merely took it as hearsay?
- A. That was the statement of the people shipping in.
- Q. And after that contest was settled you were informed that the rates improved, were you?
 - A. Yes.
 - Q. But you didn't know anything about it?
 - A. No; I know nothing about it.
- Q. And yet you thought that of sufficient importance to incorporate in your Professional Paper No. 56 in the form of an innuendo against the Union Pacific, did you not?
- A. I would not call it so. I don't remember just the statement in there. It has been some years since that was written. But I wrote exactly what I thought.
- Q. And you had no feeling against the railroad company in writing what you thought upon that occasion?
- Λ. Why, I would have no reason to have feeling against the railroad company there. They helped me in a great many ways.
- Q. Then you do have no feeling against the railroad company?
- Λ. No. I stated that merely as what seemed to me to be a fair statement.
- Q. And did you at that time consider that in making an official scientific report it was proper to include therein purely [548] hearsay matters of that kind that you had not verified and did not know were true?

A. I stated that as the report, and I think it is due to anyone who is going in there to invest in that oil field—and supposedly this report would assist in the development of that region or there would be no reason for preparing it—that they should be forewarned of that condition and to investigate it. If it was not true they could go in; if it was true I should say they should keep out. But a man who reads that report, without knowing anything about the region should carefully investigate that point before he starts drilling in that region.

Q. Why didn't you say in your report that it was merely a rumor that deserved investigation instead of stating it as a fact?

A. Now, how is that stated? Have you the exact statement?

Q. I haven't it here. I would like to have you look that up. Have you that paper here?

A. Yes; I have the paper here.

Q. No. 56?

A. Yes.

Q. Kindly hand it to me. (Witness hands paper to counsel) That is the one.

A. The statement is this: "The effect of this order was, on the one hand, to stimulate prospectors to attempt to develop this field, and on the other, it is claimed, to make the Union Pacific Railroad Company hinder the development in such ways as it might, being the only line of transportation in this region. Certain cases affecting sec. 23, T. 15 N., R. 118 W., and sec. 33, T. 14 N., R. 119 W., were heard

before a special examiner in the district land office August 23 and 25, 1904, and decision was rendered that these tracts were not "known mineral lands" and that patent should be issued to the Union Pacific Railway in accordance [549] with the terms of its land grant. All the Union Pacific lands are now patented, and with the termination of this land contest it is stated that the railroad has offered freight facilities which will materially aid in the development of the field." I think that is an entirely fair statement.

Q. Now, what was this order that was referred to in that?

Mr. McCormick—I suggest, for the purpose of the record, that you describe the pamphlet from which you are reading, and the pages.

A. The extract just read is from page 142 of Professional Paper 56, published by the United States Geological Survey. Now, on page 141 is this statement: "In August, 1900, the Union Pacific Railroad Company began a water well at Spring Valley, Wyo., and on October 14, 1900, at a depth between 491 and 493 feet, struck a sand containing oil of very high grade. Oil of a similar high grade was struck again in December between 573 and 581 feet, and the following May between 1,148 and 1,170 feet.

Intense excitement followed this find, which appears to have lost nothing in magnitude as the news spread. The whole country was soon staked out with petroleum claims under the placer mining laws. The greater part of these claims were purely speculative,

the claimants generally having neither the intention nor ability to develop them. The lands staked were of two types—unoccupied Government land and unpatented odd sections within the limit of the grant made to aid in the construction of the Union Pacific Railroad. This grant, embodied in the acts of July 1, 1862 (12 Stat. L., 489), and July 2, 1864 (13 Stat. L., 356), gave the Union Pacific all the odd-numbered sections of the public lands within certain prescribed limits; but mineral lands other than coal and iron were expressly excepted from its operations. [550]

The section on which the Spring Valley well was drilled happened to be an unpatented odd section, and it was therefore located by several claimants, who assumed that the oil discovered in the Union Pacific well satisfied the law in respect to the discovery required for each locator. The Union Pacific Coal Company had opened a large coal mine on this section and opposed this view of the matter, placing guards about the section to prevent others from prospecting on the land". Now, as to this region in general, the Land Office took the very important step of removing from entry or patent, except under the mining laws, all Government land in certain townships, and refused to issue to the Union Pacific Railroad patents for the unpatented odd sections within the railroad grant within the limits of this reservation until after December 1, 1903, when the issuance of patents was to be determined by the 'then known character of the land.' And that is the order referred to.

Mr. Mills—Now, I object to any further cross-examination along this line as unproductive of any results tending to shed light upon any of the issues in the case.

Q. By Mr. Lewers—And it was your opinion, at that time, from your investigation, that during the period prior to the time when this restriction was to be removed under the order made by the government, the railroad prevented the development of that property?

A. Why, I think that—That was the statement commonly made.

Q. And that is why you made that statement which you have read into the record?

A. I stated that it was so stated—It is not a positive statement of mine—and that rumor had gone out, that they had prevented it; and it was perfectly fair to say that. It is now stated that they would give better rates, which would encourage the development. I think it is fair—on the one hand, when [551] they have lands to acquire, that they would prevent development, but after the acquisition of those lands they would want the freight.

Q. And that was solely your reason for making the statement?

A. I have explained the reason I made it.

Q. And it was not for the purpose of casting an innuendo to the effect that that land was obtained by fraud?

A. No; because that particular land I thought was more valuable for coal. There were other lands

they acquired in there which I think are more valuable for oil than for the coal; and I think it is so recognized by some of the railroad people. I have very good reason to believe so.

Q. But were those lands which you predicted to be very valuable oil lands during your investigation in Wyoming?

A. Was-

Q. Which you have now referred to?

A. Those lands lay in the same belt and were patented before my report or field work.

Q. Were they lands which you examined as to their oil possibilities?

A. Yes.

Q. And did you predict that they would develop oil in paying quantities?

A. No.

Q. How long were you in Wyoming engaged in the examination of oil territory?

A. Three or four months in 1905.

Q. Devoted to the oil work?

A. The report, which involves that oil matter.

Q. That is, it was devoted to the entire examination?

A. Yes, it is necessary to make the entire examination to [552] arrive at the conclusions relative to the oil.

Q. The greater portion of that report is directed to coal, is it not?

A. Yes.

Q. Now, since your visit to South America in a

private capacity, you were connected with the government Geological survey up to what time?

A. I did no work for the Geological Survey until after I went to Venezuela.

Q. That is what I say. Since that time.

A. I have done no work for the Survey at all.

Q. And what has been your employment for the government since that time?

A. The only employment I have had with the government has been with the Department of Justice in connection with this suit.

Q. When were you employed by the Department of Justice?

A. On January 16th.

Q. Of 1912?

A. Yes.

Q. And how long, probably, after your return from Venezuela?

A. Why, weeks or months. I don't remember exactly.

Q. Well, in the interim were you engaged in the examination of oil land anywhere?

A. No.

Q. Now, you were employed by the Department of Justice in this case as a result of your connection with the case of United States against Diamond Coke and Coal Company, were you not?

Mr. McCormick—Objected to as calling for the conclusion of the witness. [553]

A. I don't know as to that.

- Q. By Mr. Lewers—You were so informed, were you not?
 - A. No.
- Q. Where were you living at the time when you were employed in this case?
 - A. At Washington city.
- Q. Did you there maintain an office as a consulting geologist?
 - A. Yes.
- Q. And you were sent from there and reached Los Angeles or California when?

Whereupon the further taking of testimony herein was adjourned until Monday, May 13th, 1912, at 10 o'clock, A. M., at the same place.

On Monday, May 13, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed pursuant to the adjournment.

(The last question asked Saturday, May 11, 1912, before the adjournment, was read by the reporter.)

- A. In the latter part of January.
- Q. By Mr. Lewers-1912?
- A. Yes.
- Q. Now, Mr. Veatch, by whom were you employed in Washington to come to California in connection with this case?
 - A. By the Attorney-General.
 - Q. Personally?
 - A. No. I had a letter from him.
 - Q. And have you that letter?
 - A. No. [554]

- Q. Were the terms of your employment and your instructions all embraced in written form?
 - A. Yes. I should state so, in a general way.
- Q. Did you have any oral instructions as to what you were to do when you reached California?
- A. Except that the instructions were general, that I would be under the orders of Mr. Mills.
 - Q. For what purpose? Did it state?
- Mr. Mills—The question is objected to as wholly irrelevant to any of the issues in this case.
- A. For the purpose of investigating these lands and advising him regarding scientific matters.
 - Q. By Mr. Lewers-And anything else?
 - A. No not that I know of.
- Q. And when you reached California to what portion of California did you first come?
 - A. To Los Angeles.
 - Q. And you there met Mr. Mills, did you?
 - A. Yes.
- Q. How long were you in Los Angeles before you went to the Elk Hills?
 - A. Several days.
- Q. And during that period that you were in Los Angeles did you make any examination of any affidavits that had been collected in connection with this action?
 - A. Yes.
 - Q. How many?
 - A. I do not remember the number.
 - Q. Well, as near as you can state, how many?

A. There were probably eight or ten or something of that sort.

Q. Then there were more affidavits than were submitted [555] to me?

A. Yes.

Mr. Mills—The witness stated that on cross-examination Saturday.

Mr. Lewers—I am aware of that. I want to get it beyond any question.

A. And in addition to looking over these affidavits, what other preparation did you make for your trip to the Elk Hills?

A. I looked over a number of reports relating to the field work.

Q. What sort of reports? Made by whom?

A. There was a report by Frank M. Anderson, who was geologist for the Southern Pacific Company, relating to the field work prior to January 1st, 1905, discussing the general character there and giving me some idea of the nature of the work which had been done in that region by the Southern Pacific Company.

Q. What else?

A. The report of Watts—the state report—in 1900.

Q. What else?

A. And I had, of course, Arnold's report, which I had seen before.

Q. You mean Bulletin No. 406?

A. Yes.

- Q. Anything else?
- A. That is all I recall.
- Q. Were there any other reports that you examined? You say that is all that you can recall. Were there any others?
- A. You mean at Los Angeles or at any time prior to my going out to the Elk Hills?
- Q. At any time prior to your going out to the Elk Hills.
- A. I went over a number of reports at Washington. [556]
 - Q. What were they?
 - A. There was a report by W. L. Watts, in 1894.
 - Q. That is the one you referred to?
- A. No; I referred to the one in 1900, if you will pardon me, which is another report by Watts. The '94 report is entitled "The Gas and Petroleum-yielding Formation of the Central Valley of California, Bulletin of the California State Mining Bureau No. 3." The 1900 report is by W. L. Watts, "Oil and Gas-yielding Formations of California, Bulletin California State Mining Bureau No. 19." And then in Washington I went to the library of Congress and examined maps of this region.
 - Q. What maps?
- A. I found a map by W. Holt,—a map of the states of California and Nevada—published in 1870, showing oil springs in this region. Also, Colton's map—
- Q. You say "oil springs in this region." Do you mean the Elk Hills?

A. No, McKittrick, and the front of the range there. And Colton's map of California and Nevada, published in 1875. There was a number of editions of those maps showing the existence of oil springs in this locality.

Q. "In this locality," do you mean in the Elk

Hills?

A. No; I mean in the vicinity of the Elk Hills.

Q. Any other bulletins?

A. No.

Q. And from the time you first were employed in connection with this case until you reached your final conclusion, what other bulletins or reports of the conditions prior to January 1, 1905, did you examine besides what you have mentioned?

A. The maps of the developments by Barlow & Hill which was a map published in 1900 or 1901, showing the development at [557] that time, and one published in 1904, showing the development at that time.

Q. You regarded those as accurate?

A. Approximately so. They are entirely accurate for any purpose of basis of any judgment in this case, I think.

Q. Are they official in any sense?

A. Official only in the sense that they were copyrighted.

Q. And they were prepared like any other mining prospectus, were they not?

A. I think not. I think there is a great difference between those and an ordinary prospectus.

- Q. You are familiar, are you not, with the method in which maps are prepared in any mining country showing claims and developments, are you not, when those maps are prepared for general sale? You have had those experiences?
 - A. Yes sir.
- Q. And you know, as a matter of fact, that those maps are usually based upon hearsay information at second, third, fourth and fifth-hand, upon approximations and upon vague and indefinite information, in many cases?

Mr. Mills—We object to the question as wholly irrelevant.

- A. I think that may be true in certain cases, but I do not think that applies to these Barlow & Hill maps. I think they were prepared with a great amount of care, and they were prepared with much more personal knowledge of the region than is true of the character of maps to which you have referred.
- Q. By Mr. Lewers—Then, in referring to the Barlow & Hill maps, you assumed that those were prepared with great care, did you?
 - A. No, I inquired regarding them.
- Q. As the result of your inquiries you assumed that they were prepared with great care? [558]
 - A. Yes.
- Q. And for that reason, as a scientific man, you were willing to accept them as data upon which to base conclusions?
 - A. Yes.

- Q. What else did you examine, if anything, with reference to the conditions prior to January 1, 1905?
 - A. I had the affidavits which you have.
 - Q. And also other affidavits?
- A. Which did not relate to seepages. I also talked with a number of people who were familiar with the field and had knowledge of the region, particularly with Mr. Youle and with Parker Barrett, and with others.
 - Q. Will you name all with whom you talked?
- A. I cannot do that because I do not remember the names of many of them.
 - Q. Name as many as you can, Mr. Veatch.
 - A. Prior to what date?
- Q. At any time prior to this trial—prior to the beginning of the taking of testimony in this case.
 - A. I talked to B. K. Lee and to Silas Drouillard.
 - Q. Is that all?
 - A. That is all that I remember distinctly.
 - Q. Did you talk to Mr. Brisco?
 - A. Not prior to the beginning of the trial.
 - Q. Did you talk to Mr. John R. Scupham?
 - A. Yes.
 - Q. And where?
 - A. At Oakland.
- Q. Did you make a trip there for the special purpose of seeing him?
 - A. Yes.
- Q. Did you talk to any other individuals in the northern [559] part of California—in the vicinity of San Francisco—in connection with this case?

A. You mean in a general way, or specifically regarding any data in the field?

Q. Either. I mean for the purpose of obtaining any information concerning this case.

Mr. Mills—We object to any general talk by the witness unless it refers to data in the field.

A. No, not for the purpose of obtaining special information.

Q. By Mr. Lewers—And the only person with whom you spoke with reference to definite information in reference to the Elk Hills or that district, in San Francisco, or in the vicinity of San Francisco, was Mr. John R. Seupham, was it?

A. No; I talked to a number of people there, but I was not seeking special information regarding the Elk Hills.

Q. Was he the only one from whom you sought special information?

A. Yes, I should say so. I can give you a list of people there that I talked to, if you wish.

Q. You mean talked to generally?

A. Yes.

Q. I am asking only as to those from whom you sought information concerning the Elk Hills or that territory. Were there any others besides Mr. John R. Scupham?

A. I talked to Dr. Branner. That was not seeking special information regarding that field. I talked also to Mr. Dumble who is chief geologist of the Southern Pacific.

774

Q. Anyone else?

A. I incidentally met Mr. Gester, but I do not think I mentioned the Elk Hills.

Q. Anybody else?

A. Mr. Taft, who is also a geologist of the Southern Pacific, [560] and a friend of mine.

- Q. Anybody else? I am not asking for those whom you met, but merely those with whom you talked concerning this territory for the purpose of getting information, or who furnished you information?
- A. I should say that I have given you those who furnished me information. I do not believe those that I last mentioned furnished me information.
 - Q. On what date did you first go to the Elk Hills?
 - A. It was the early part of February.
 - Q. Can you fix the date more closely?
 - A. It was practically the first day of February.
 - Q. How long did you remain there?
 - A. I was in that region about four or five days.
- Q. And of that four or five days what portion of the time did you spend in the Elk Hills?
 - A. Part of one day.
 - Q. And the rest of the time was spent where?
 - A. In the region between McKittrick and Sunset.
- Q. And then after you had left there where did you go?
- A. I do not remember except in a general way. I was in Los Angeles and I was also up in San Francisco.
 - Q. When did you return to the Elk Hills?

- A. I was in the Elk Hills again about the middle of February.
- Q. You were there on the 22nd of February, were you not?
 - A. Yes.
- Q. And how long were you on that occasion?
 - A. Two days.
- Q. And that was the time when you took the. photographs?
 - A. Yes; part of them.
 - Q. Who accompanied you on that trip? [561]
 - A. Mr. Martin.
 - Q. Who has testified here?
 - A. Yes.
 - Q. Anyone else?
 - A. No, except the driver.
 - Q. Who accompanied you on the first trip?
 - A. Mr. Mills and Mr. Parker Barrett.
 - Q. Anyone else?
 - A. Yes; I think there was Hodgkinson.
 - Q. Who is he?
 - A. I do not know that.
- Q. After your second visit about the 22nd of February, when did you again visit the Elk Hills?
 - A. The last of February.
 - Q. How long were you there on that occasion?
- A. I was in that region about two days; in the Elk Hills part of one day.
- Q. On your second visit how long were you in the Elk Hills?

- Both days. A
- Part of two days? Q.
- A. Yes.
- Then when did you again return to the Elk Q. Hills?
 - That was the last time I have been there. A.
 - The end of February? Q.
 - Yes, or first of March. A.
 - And you were there in the Elk Hills how long? Q.
 - Part of one day. A.
 - Have you been all over the Elk Hills? Q.
- I have this year been in the western two-A. thirds only.
 - Q. In the western two-thirds only?
 - A. Yes.
 - Q. Have you been all over Township 30-23? [562]
 - A. Yes.
 - Q. In every section?
 - A. Yes.
- Q. And I understand you to say that you never made any particular examination of the formation where the railroad goes through in the western end of the Elk Hills?
 - A. No.
 - Merely looked at it as the train went through? Q.
 - A. Yes.
- You did not observe there, did you, whether or not there was any evidence of stratification dipping in different directions?
 - A. I thought I saw such things. It is very plain

to the north. It is rather obscure to the south. But from observations I made on the south slope of the hills, away from there, I felt sure that my suspicion there that there was a southern dip, was correct.

Q. What was the angle of the dip toward the northeast?

A. I should say it was somewhere between 20 and 35.

Q. Isn't it a fact that at that place a portion of the formation dips at an angle of about 45 degrees to the northeast, and another portion dips with an angle of less than 6 degrees?

A. It is possible.

Q. You didn't see that?

A. I saw a rather steep dip. Now, a 45 degree dip would be a rather steep dip. Between 35 and 45 degrees.

Q. Did you see right beyond that another dip of less than 6 degrees?

A. No, I don't remember seeing it.

Q. And you didn't think it important to go and look, did you, at any time? [563]

A. No, I didn't think it was especially important. It is clearly an anticlinal hill there.

Q. Who accompanied you on your fourth trip in there?

A. Dr. Branner.

Q. And on that occasion you went over to the so-called gas blow-out or oil seepage, in Section 32, 30-24, did you not?

A. Yes.

- Q. Did you at any time accompany any other geologist except Dr. Branner to the Elk Hills?
 - A. Yes. I was in there in 1910.
 - Q. At what time in 1910?
 - A. In the summer of 1910.
 - Q. At what time?
 - A. In the summer.
 - Q. With whom?
 - A. Yith Ralph Arnold.
 - Q. How long were you in there on that occasion?
 - A. A day or two.
 - Q. Was that when Mr. Arnold was engaged in the preparation of Bulletin No. 406?
 - A. No.
 - Q. It had been prepared, had it?
 - A. Yes.
 - Q. What examination did you make on that occasion?
 - A. The eastern end of the Elk Hills, I was over.
 - Q. Together with Mr. Arnold?
 - A. Yes.
 - Q. Was Mr. Johnson there?
 - A. No.
 - Q. Did you at any time accompany any other geologist to the Elk Hills?
 - A. No. [564]
 - Q. With what geologist (and by the term "geologist" I include those of low and high degree) have you consulted with reference to the Elk Hills or that territory in the vicinity, since you were employed in this case?

A. What do you mean by "consulted?" Do you mean talked to anyone?

Q. No; talked about the country. I don't merely mean with geologists to whom you said good morning.

A. Or if I said the word "Elk Hills" to them?

Is that a consultation?

Q. I think you understand what I mean by discussing the character of the Elk Hills, talking or consulting with them with reference to the Elk Hills.

A. I think I have given you all that would come under the term "consultation." I have mentioned the Elk Hills to a number of people.

Q. Then the only persons with whom you have consulted with reference to the Elk Hills would be Mr. Ralph Arnold?

A. No. I did not consult with him regarding the Elk Hills since my employment.

Q. Or Dr. Branner?

A. I think I stated that I did not consult with Mr. Arnold.

Q. Did you consult with Dr. Branner?

A. Yes.

Q. With anybody else?

A. Not that I recall.

Q. Now, have you asked any geologist questions with reference to their knowledge of the Elk Hills, aside from Dr. Branner?

A. I do not believe that I have.

Q. Haven't you discussed the Elk Hills in any

way since your employment in this case with Mr. Ralph Arnold? [565]

- A. No.
- Q. You have met Mr. Arnold a number of times since your employment?
 - A. That is right.
- Q. And at no time have you referred to the Elk Hills?
 - A. Not consulting him.
 - Q. Have you discussed the Elk Hills with him?
- A. No. You see there is this point: Mr. Arnold made that examination upon a geological survey; and in such examination he obtained confidential information and the Geological Survey is desirous that that confidential information shall not be infringed in any way, and, in carrying out that policy, I have been very careful not to discuss the matter with him.
 - Q. Although he had embodied the results of his investigations in Bulletin 406, you regarded it as still confidential?
 - A. So far as there might be matters that were not in there which might be touched in a discussion with him.
 - Q. I am not at this moment anxious for your reasons. I merely want to know the facts.
 - A. I have stated them.
 - Q. You have not discussed with Mr. Arnold the Elk Hills or the vicinity?
 - A. I have not.
 - Q. Now, have you been present at any time when

any discussion took place with reference to the Elk Hills between some geologist and any other individual?

Mr. Mills—Objected to as so indefinite as not to raise any presumption whatever that it relates to any of the issues in this case.

A. I don't quite understand your question.

Q. By Mr. Lewers—In other words, have you been present in the room that is used as an office by Mr. Mills during the [566] discussion of any geologist concerning the Elk Hills?

A. Yes.

Q. With what geologist?

A. Dr. Branner.

Q. Anyone else?

A. Mr. Martin.

Q. Anyone else?

A. I have been there a great deal.

Q. Were you present at any time during the discussion with Mr. Williams of the Associated Oil Company?

A. Yes, at part of the discussion, I think, I was there.

Q. Anyone else whom you would call a geologist?

A. I would call Mr. Youle a geologist.

Q. You were present during the discussions with him?

A. Some of them. I don't know how many were held. I was there part of the time.

Q. Anyone else? You have already testified with reference to Mr. Youle.

- A. You mean with regard to some one that I have not testified to?
 - Q. Yes.
 - A. I do not recall of any.
- Q. Now, since the time you were employed in connection with this case you have devoted practically all of your time to this case, have you not?
 - A. Yes.
- Q. That is, from some time about the middle of January of this year?
 - A. Yes.
- Q. And during all of that peirod you have been in the Elk Hills how many days in all?
- A. In the Elk Hills proper about four days; in that region [567] somewhat longer.
- Q. And in any of the oil fields how much have you been?
 - A. Possibly two weeks.
 - Q. That is, including the time in the Elk Hills?
 - A. Yes.
- Q. And the total time that you have spent in actual field work in the oil fields was possibly about two weeks?
 - A. Yes.
- Q. And what have you been doing the rest of the time in connection with this case?
- Mr. Mills-That is objected to as immaterial and insulting.
- Mr. Lewers—It is not intended to be insulting. I cannot see how counsel can get any such meaning.

- A. I was in the hospital part of the time, if that is of interest to you. I cannot see how it is.
- Q. Yes, it is. I merely want to know how long a time it was.
 - A. A week or two or something of that sort.
- Q. I assume from your former statement that you devoted practically all of your time. So, if there is any time that you were not able to devote to your work, I am anxious to know what it was. Was there any other time aside from the time you were in the hospital?
- A. Yes, there were several days that I was discussing other matters entirely, possibly covering two or three weeks.
- Q. Then, aside from those periods when you were discussing other matters and for the short period when you were in the hospital, and aside from the two weeks in all that you were actually in the field, what work were you doing in connection with this case?
 - Mr. Mills-Objected to as immaterial.
- A. I think I have stated the work that I have done in this [568] case.
- Q. By Mr. Lewers—I think not, Mr. Veatch. Can you not state what work you were doing in connection with this case during the great portion of that time?
- A. I have stated that there were investigations in the field. There was the review of the various reports that have been enumerated. There were con-

sultations with various individuals, occupying different times. There was preparation of a short report to Mr. Mills, which has been mentioned before.

- Q. Anything else?
- A. I think that covers it.
- Q. Your field work took three weeks?
- A. Yes.
- Q. It has been a period of over three months since you were employed in this case?
 - A. Yes.
- Q. What were you doing the rest of the time? Was that devoted entirely to reading these reports and examining these maps to which you have referred?
- A. No. I have been a part of the time waiting for the trial to come to issue. I was prepared, so far as what I could do, a long time ago.
- Q. Now, Mr. Veatch, did you in any way assist by giving the benefit of your advice in the preparation of this trial?
- A. No, I should say not, except to explain to Mr. Mills what the geologic conditions were. We visited the Hills together for the express purpose of my pointing out to him the geologic conditions,
- Q. Is that all that you did in the way of preparing for this trial or assisting in its preparation?

Mr. Mills-Objected to as immaterial.

- A. I should say so. [569]
- Q. By Mr. Lewers—Did you not consult with and interview different witnesses?

A. None except Mr. Scupham, and Mr. Youle I saw. I have been present when other witnesses have been interviewed on a number of occasions.

Q. You went to San Francisco to interview Mr. Scupham in connection with this case?

A. No; I was at San Francisco and it was suggested that he was there, and I was asked to call on him.

Q. And you did so?

A. I did so.

Q. Did you interview any other witnesses who have appeared on the stand here beside Mr. Youle and Mr. Scupham?

A. I interviewed Parker Barrett, as I have stated.

Q. Any others?

Mr. Mills-Objected to as immaterial.

A. No. I should not say that I interviewed them.

Q. By Mr. Lewers—Did you not talk to quite a considerable number of witnesses before they went on the stand to testify?

A. No.

Q. Were you not present during the interviews with those witnesses, in which interviews you assisted by means of your suggestions?

A. I asked questions in a number of cases, endeavoring to arrive at the facts in the matter.

Q. Is it not a fact that you were employed in this case for the purpose of assisting the attorneys for the government in the prosecution of this action?

- A. I think that has been stated.
- Q. And in doing so you have given practically all of your time and have rendered such assistance as was within your power? [570]
 - A. A large part of the time.
- Q. And you have frequently contributed assistance to the prosecution in this case by suggestions as to the lines of testimony and questions to be asked witnesses?
- Mr. Mills-Oh, all that is objected to as wholly immaterial.
- A. How much I have contributed, would not be for me to say; it would be for the attorneys to say whether I contributed or not.
- Q. By Mr. Lewers—You have endeavored to contribute to the best of your knowledge?
 - A. I have endeavored to; yes.
- Q. You have sat in this court by the side of the attorneys for the government and during the examination of witnesses have constantly made suggestions as to questions?
 - A. I frequently made suggestions.
 - Q. And you have been in this court daily from the time this examination began, have not you?
 - A. Yes. I think that has been stated before.
 - Q. And during one of the recesses taken for a few days you accompanied the attorneys for the government on a trip to San Francisco for the purpose of interviewing witnesses there, did you not?
 - A. No; I did not go for the purpose of interview-

ing witnesses. It was purely a private matter that I went to San Francisco on.

Q. Did you on that trip in any way assist by means of suggestions or by means of actively taking part in interviews with proposed witnesses?

A. No.

Q. You devoted that particular trip entirely to your own private business, did you?

A. No; there was a discussion of the case with Mr. Mills, [571] but there was nothing involved in my interviewing witnesses.

Q. And you have from the beginning taken quite an active interest in this case?

A. I have. I am always interested in anything in which I am employed.

Q. And you have the same interest, have you not, in your own mind, Mr. Veatch, that an attorney prosecuting your end of the case would have?

A. No, I do not think that I have. It is purely-

Q. Do you think-

Mr. Mills-Just a moment. Let the witness finish.

A. It is purely a matter to me of what is right. I am convinced in my own mind from my knowledge of the geologists of the Southern Pacific that they knew and could not help but know from their examination in that region, that this Elk Hills territory was good oil land.

Q. By Mr. Lewers—And you are very firmly convinced in your own mind, then, that they were guilty of deliberate fraud, are you not?

A. Deliberate fraud in what way?

Q. In deceiving the United States government?

A. The fraud may rest with their superiors, and probably does. There can be a superior who stands up—

Q. Will you kindly answer my question?

Mr. Mills-Let the witness conclude.

Mr. Lewers—I desire the answer to be responsive.

A. I am trying to make it as responsive as I can.

Q. If you will listen to the question-

Mr. Mills—I object to your interrupting him again in this way. He has a right to conclude his answer.

A. Not necessarily so, for this reason: It is possible with a large organization of that kind to have those at the top [572] gather information from one side which is definite that that is good mineral land, and to then pull the string in another direction and have that land selected by some one else. To say that the geologist who reports that to be mineral land is guilty of fraud, I do not think necessarily follows. He reported what was the truth and the fact.

Q. By Mr. Lewers—And you assumed that the geologist of the Southern Pacific Railroad Company has reported as to the character of that territory in the way that you have now stated?

A. I concluded that they knew it was mineral land.

Q. The geologists or employees of the Southern Pacific Railroad Company knew the character of that country?

A. I think so.

Q. You have testified that you examined certain affidavits, certain of which on my demand were furnished me.

Mr. Mills-On your request, you mean, don't you?

Mr. Lewers-No; I will put it the other way.

Mr. Mills—You are trying to be impolite this morning in some way.

Q. By Mr. Lewers-In that connection I will ask you if it did not strike you as somewhat peculiar that the affidavit of Mr. B. K. Lee should state the following: "I know Professor John Owen who was geologist for the Kern T. & O. Company" meaning the Kern Trading & Oil Company, "who came to me in 1903 and made my acquaintance in order that I might show him the section corners in the north end of the McKittrick field. He was at that time examining the land as to the formation for said Company. From that time until December, 1909, I met him frequently." And after having made a sworn affidavit to that effect, he testified as follows with reference to Mr. Owen on Page 303 of the transcript: "Q-Were you acquainted with Mr. Owen during his lifetime-the geologist? A-Yes sir. Q-Whom was he working [573] for at that time? A-He was working for the S. P. Company. For the S. P., I should say. Q-In what capacity? A-Geologist."

A. I think there is no conflict in those statements to the ordinary man, for the—

Q. You assume-

Mr. Mills-Just a moment.

A.—for the reason that I think Mr. Owen stated that he was a geologist for the Southern Pacific, and that he was also consulting geologist for the Kern Trading & Oil Company. I think he held both positions.

Q. By Mr. Lewers—Where did you get that suggestion?

A. He stated that under oath that he was a geoly ogist for the Southern Pacific Railroad Company.

Q. Mr. Owen did?

A. For the Southern Pacific Railroad Company and for the Kern Trading & Oil Company.

Q. Was Mr. Owen under oath in this case or any other case?

A. I can't say that it was in this case.

Q. Who said that?

A. Mr. Owen said that under oath, is what I said.

Q. Where?

A. In a contest proceeding before the General Land Office.

Q. When?

A. In 1907 or '08.

Q. And it did not occur to you that Mr. Lee was referring to a period prior to 1904, did it?

A. It occurred to me in this way: That Mr. Lee is a man that has been in that country for a great many years as an oil operator, and the relation between the Kern Trading & Oil Company and the Southern Pacific Company is one of notorious common knowledge there. Whether that is right or not—

Q. As a scientific man, you accept notorious common knowledge [574] as proof of a man's employment, do you?

Mr. Mills-Finish your answer first.

A. I think in matters of that kind it has a very conclusive value.

Q. By Mr. Lewers—Just as it had in the Union Pacific case?

A. In what way?

Q. As it appears in professional paper No. 56?

I know in the Union Pacific case, this: That the Union Pacific Coal Company acquired certain lands-coal lands-in which there was no outcropping of coal at the surface. It laid down the dip from the outcrop. They acquired that as agricultural land, the superintendent of the coal company making affidavit that it was non-mineral land. I know that Judge Cornish who was first vice-president of the Harriman system, came to Washington on that matter and made no question of any difference between the Union Pacific Railroad Company and the Union Pacific Coal Company, and that on that occasion Judge Cornish said that he was not a geologist, but that if as a layman he could be convinced that that was coal land, he would reconvey it to the Government, which was done.

Q. What has that got to do with this case?

A. Probably if Judge Cornish were alive, this case would not occur.

Q. You draw that conclusion?

- A. Yes; from my opinion of Judge Cornish.
- Q. You do not have as good an opinion of the other attorneys in this case?
- A. The other attorneys in this case have not come in that manner and said, "If you convince me as an ordinary man that this is coal land,—" I think you might be convinced that this is oil land, just as a fair man. [575]
- Q. You think probably the defense in this case is not in the same fair attitude of mind toward your views or the views of the Government as Mr. Cornish was?
- A. No, not to my views but to the facts, to the evident facts of the matter.
- Q. You see a distinction between your views and the facts?
- A. No; it is perfectly good oil land and any geologist would advise its acquisition for that purpose and its development for that purpose.
- Q. We will come to that in very specific detail. What other action have you taken or what other assistance have you rendered the prosecution of this case besides what you have already related?
 - A. I think that covers it.
- Q. I will ask you again, is it not a fact, to your knowledge, Mr. Veatch, that you were employed in this case by reason of the result of the case of the . United States against the Diamond Coal and Coke Company?
 - A. No, I should not. I think I was employed

because I had been chairman of the Oil Land Classification Board, and the Coal Land Classification Board of the Survey? I was engaged in private work and had been specially interested for a number of years in the matter of mineral lands in the public domain and the matter of the disposition of those lands.

Q. You did testify as an expert in that case to which I have referred?

A. I did.

Q. And is not your illustration given in connection with this case in your direct examination of the coal outcropping around the side of a valley based upon what was revealed by the testimony in that case?

A. No; that is purely a scientific statement. [576]

Q. You perhaps do not refer to what I refer. When you made the statement, Mr. Veatch, that if you had a coal outcropping showing itself around the sides of a valley, that you could from that fact determine that coal existed in commercial quantities underneath the bed of a valley?

A. No; you could determine that that was coal land. I could not guarantee to any man that there would be commercial coal there, but I would say that the possibilities of developing coal were so great that it has a value expressed in dollars as coal land. I would expect that man to make a commercial success. I would advise him on that basis the same as I would on oil land. I would not guarantee that the

oil land was a commercial proposition, but I would say that I believed that it was and that it would justify him in spending his money on the coal field likewise.

Q. I asked you a simple question, and you answered—whether your illustration was based on the Wyoming case, and you said not. Now, I will ask you another question. In the Wyoming case is it not a fact that there was an outcropping very distinctly shown on the ground for the greater portion of its distance—for seven or eight miles—along the side of the valley, dipping at an angle of from fifteen to twenty-seven or thirty degrees toward the west, underneath the floor of the valley, and that that outcrop at one point approached the land in controversy and within a few hundred feet, and that the land furthest removed from that outcrop—by that I mean the land in controversy—was at a distance of about one mile?

A. I think it was more than that, as I remember it. I can check it exactly, if you desire.

Q. Well, for more than a mile? Would it exceed a mile and a half?

Mr. Mills—Just allow me to interpose this objection. [577] You are referring to the Diamond Coal and Coke Company?

Mr. Lewers-I am.

Mr. Mills—That is so far removed from the issues in this case, that I must object to the question because of its utter immateriality and irrelevancy to any of the issues in the case.

A. I would have to check that to make an exact statement.

Q. By Mr. Lewers-What is your recollection?

A. It is probably a couple of miles. Another factor entered in there of importance: That the coal in those farther tracts were about fifty-five hundred feet from the surface, and the deepest mine in that region at that time was about five or six hundred feet.

Q. Did you testify in that case that the coal was fifty-five hundred feet?

A. I think so.

Q. Did you not testify that it was about two thousand feet?

A. As to specific tracts only. The coal varied in depth. I can give you the exact depth at any part of that land if you desire it.

Q. I do not desire that. What I want to know is whether or not in that particular case there did not exist actually developed mines both to the north and south on that outcrop?

A. Yes.

Q. And those had been developed to what distance down the dip?

A. You mean at the time that I examined them or at the time that that land was acquired?

Q. At the time you examined them.

A. It was in the neighborhood of half a mile. I can give you that exactly, if you wish. [578]

Q. And it is also a fact, is it not, that at a distance of from between three and four miles to the

east of that outerop there was another very large lignite deposit?

- A. No; there was not.
- Q. That is not a fact?
- A. No, it is not a fact.
- Q. Then, Judge Hook's opinion in that respect wherein he states that there was such a deposit, was in error?
 - A. If he said to the east of that he is in error.
 - Q. In what direction was it?
 - A. West.
- Q. It is immaterial as to the direction. What was the distance?
- A. It was about six to ten miles. I can give you that exactly. That is simply recollection. I can refer to the maps and give it to you exactly.
- Q. At the time when you examined the development of that outcrop that had taken place, there had been work done within two or three feet of the land in controversy at one point?
- A. One tract only. There was a great number of tracts scattered over a large area.
- Q. If you pay attention to the question. At one point in the land in controversy.
 - A. Yes, one point of one tract.
- Q. And at one point it had approached more or less closely?

Mr. Mills—Further examination on that line is objected to as wholly immaterial.

A. On some tracts it was three or four miles from the land-

- Q. By Mr. Lewers-In controversy?
- A. Yes sir.
- Q. Is it a fact that there was not a portion of that land [579] in controversy that exceeded a mile and a half from the outcrop?
- A. Yes, but the mines that you refer to are ten miles apart, and some of them fifteen miles, possibly. The work on the mines could not have approached these places in between, possibly. The land was seven miles from the mines.
- Q. Mr. Veatch, if you will pay attention to the question, the question was, was it not a fact that at some portions of the outcrop the development at the time you examined it had approached to within a short distance of the land in controversy?
- A. In one tract, yes. That has been testified to. But there were a number of tracts.
 - Q. And that was all?
- A. That is all I can recollect. I can refresh my memory by looking at the map and give you an exact statement, if you desire.
- Q. Now, when you stated in your examination that you were acquainted with that portion of the oil fields of California represented by what is known as the McKittrick and Sunset districts, did you mean that you were acquainted as the result of your personal examination?
 - A. In a general way, yes.
- Q. But most of your information was derived from what source?

A. There is a detailed map by Ralph Arnold which I used for the general relations; not for the specific points—

Q. That is, the map accompanying Bulletin 406?

A. —believing that the geology in 1900 or a hundred years previous, or more, was just the same as it is today—

Q. You insist on arguing the matter and I shall be compelled to assume that you are in the position of a partisan. Will you kindly answer my question and refrain from suggesting other matters?

Mr. Mills—I suggest to counsel that he permit the answer [580] to be fully made before he interrupts.

(The reporter reads the question.)

Q. By Mr. Lewers—Is that the map you referred to?

A. Yes.

Q. That map was used by you as a basis for your general examination in that field, was it not?

A. Yes.

Q. Now, you say that your information in a general way or partially was obtained from your personal observation, and you also made use of this map. From what other source did you obtain information concerning that oil district?

A. From the report of Mr. Frank M. Anderson who was—

Q. Covering what territory?

A. —the geologist of the Southern Pacific Company.

- Q. Covering what territory?
- A. The report is entitled the Mount Diablo Range, or something like that,
 - Q. Covering what territory?
- A. Covering the territory from McKittrick to Coalinga.
 - Q. And the Elk Hills?
 - A. No.
 - Q. Any other bulletin or report?
 - A. No; not that I recall.
- Q. Then your conclusions as to the territory referred to are based upon a partial personal examination and upon a map and, I suppose, the bulletin of Mr. Ralph Arnold?
 - A. The map.
 - Q. Just the map?
 - A. Yes.
 - Q. And this report of Mr. Frank M. Anderson?
- A. Yes; with the statement of seepages and wells that we have discussed before. [581]
- Q. And in addition to that you say you had in mind in forming your conclusions the various seepages that have been testified to?
 - A. Yes; I had a portion of them in mind.
- Q. And you had obtained some of that information from affidavits?
 - A. Yes.
- Q. Some from personal interviews with witnesses?
 - A. Yes.

- Q. And some from publications?
- A. Yes.
- Q. And some from personal observations?
- A. Yes.
- Q. And did you base your conclusions in any way upon this evidence concerning the seepages?
 - A. Yes.
- Q. And did you base your conclusions in any way upon the evidence concerning the seepages in the Elk Hills?
- A. That was confirmation of the conclusion reached from the seepages in the outcrop.
- Q. Then the evidence concerning the seepages in the Elk Hills would have been unnecessary for the purpose of reaching the conclusion that you did reach?
 - A. I think so. That is simply confirmation.
- Q. And in reaching these conclusions you disregarded, did you not, the testimony of Mr. Jacob Kaerth as to asphaltum reefs in 30-23?
 - A. I reached that conclusion before I heard that.
 - Q. You disregarded that testimony, did you not?
 - A. Yes.
 - Q. Because you knew it was not true?
- A. No; I didn't know that it wasn't true. I knew that [582] you objected to it very strongly, and, in order that there be no point of difference in our view-points, I omitted it. I also omitted other testimony. I omitted the testimony of—
- Q. Will you answer my question about Mr. Kaerth? We will come to the other testimony.

Mr. Mills—I object to counsel interrupting the witness all the time when he is concluding his answer.

Mr. Lewers—I shall continue to interrupt when he gets onto matters that are not responsive, because I want to get through with this examination.

A. I wish to say that I omitted the statements of Ira M. Anderson in the same way.

Q. By Mr. Lewers—With reference to the oil indications in 30-23?

A. No; in 30-22, that happened to be.

Q. Did you not disregard both those witnesses in that respect because you knew from your own examination that they were testifying to something that was not true?

A. No; I saw no asphaltum reefs on the land. But Jacob Kaerth also testified to seepages in 17 and in 25 of 30-23, which I regard as entirely probable.

Q. Did you see those?

A. I did not.

Q. You think they are probable, however?

A. They are corroborated by other witnesses. They occur along the axis of the anticline there where it is quite likely that he would find such small seepages.

Q. What other witness corroborates that statement made by Mr. Kaerth and Ira M. Anderson?

A. The Ira M. Anderson testimony is not corroborated. That relates to 30-22.

Q. Is the Jacob Kaerth testimony corroborated?

A. Yes as to 17. There is Captain Frank Barrett's corroboration.

Q. Which you regarded as plentiful?

A. Yes. As to the other portion of Kaerth's testimony relating to 25, Mr. Wagy testified to something that was probably in 26, and those might readily refer to the same locality. One was in the southwest quarter of 25 and the other was possibly in 26, and those could refer to the same point. I may say further, in those small seepages, the conditions by looking at them now, are much poorer than they were before people commenced drilling in the hills. That 26 matter could not be checked as it is now, because there is a great mass of waste oil there and you cannot tell whether it is the waste oil of today or an original seepage.

Q. A great mass of waste oil on Section 26 at the present time, is there?

A. Yes.

Q. And you say that this testimony of Mr. Barret was corroborated by Mr. Wagy?

A. No; that the testimony of Mr. Kaerth regarding 25 was corroborated by Mr. Wagy.

Q. That is in Township 30-23?

A. In 30-23.

Q. Were you not aware that in the affidavit furnished by Mr. J. I. Wagy he stated as follows: "That in 30-23 I never found any asphaltum exudation, but there were gypsum deposits there where I dug down into a gypsum bed where it was in powdered form,

but never knew of any gypsum in this township in the crystalline form, and I am of the opinion there is not gypsum in said township sufficient to make it commercially valuable."

Mr. Mills-What are you reading from?

Mr. Lewers-The affidavit of Mr. J. I. Wagy. [584]

- A. I do not see what that has to do with the statement that you refer to. It is not a matter of gypsum.
- Q. You don't see that his statement that he found no asphalt indications anywhere in 30-23 has anything to do with your conclusion that he corroborated the other witness?
- A. If you look up the record,—I may have incorrectly stated. It is M. S. Wagy that testified to 26.
 - Q. Have you an affidavit from M. S. Wagy?
 - A. No; I did not testify that I did.
- Q. You did not at any time have an affidavit from M. S. Wagy?
- A. This statement is based on the statement in the record, and not the statement of J. I. Wagy.
- Q. Just what did you use as the basis of your conclusions concerning the Elk Hills being oil lands, in short form?
- A. Along the east flank of the Temblor Range there is a series of porous beds exposed, which can be traced for many miles readily. Along this outcrop or near it where there has been a slight faulting, there are seepages of oil. These seepages extend from below Sunset to north of McKittrick,

showing a persistence of the oil impregnation in those porous beds. These porous beds dip to the eastward or northeastward, toward the San Joaquin Valley, and are interrupted by a number of folds. That is, the gentle slope is interrupted by a number of folds, these folds being of ideal character for oil accumulation. One of these folds is the Elk Hills. It is, broadly speaking, an elongated dome, and from the persistence of the oil along the outcrop as shown by those seepages, and that showing also corroborated by the great number of wells that have been sunk down the dip from this outcrop prior to 1904, indicates to me that the Elk Hills is very good oil land.

Q. Now, specifically, Mr. Veatch, where did you get the in [585] formation about these porous beds?

A. By examination along the outcrop there.

Q. That is based, then, upon your actual observation?

A. And from the description of the material lying there. That is, the upper part of those beds above the diatomaceous shale. There is a general description of that in Anderson's report—Frank M. Anderson's.

Q. And where situated?

A. And there is also a description in the report by Arnold.

Q. Did you disregard Arnold's description?

A. No.

Q. Where did you get your information concerning the dip at the various points?

- A. You mean the general dip to the valley?
- Q. Yes.
- A. I observed that myself.
- Q. And you determined the dip of the formation which you regarded as carrying the oil or producing the oil from your own observation on the ground?
- A. I did of the dip of the formation through the valley, yes.
- Q. And in reaching your conclusion as to that, you relied on nothing except your observation?
 - A. No, but I should think it was sufficient.
- Q. I want to know as a fact did you rely on anything else in reaching your conclusion as to the dip toward the San Joaquin Valley of these formations?
 - A. I had the Arnold map.
- Q. And did you disregard what was said on the Arnold map?
 - A. Not in general. I might in detail.
- Q. That is, you disagreed with it in some respects?
- A. In minor respects, yes. I think it is a correct [586] general picture of the region. It does not pretend to be a final map of the region. It is merely a preliminary map.
- Q. And do you pretend to have made a final determination of the dip of that region?
 - A. No.
 - Q. Your observation was merely cursory?
- A. It was a matter of examination to determine whether the Elk Hills were oil lands, and that was sufficient to do that.

Q. Your examination was merely a preliminary and cursory one as geological examinations go?

A. It was certainly not a detailed one. That is, of the whole region.

Q. Now, Mr. Veatch, where did you get your information concerning the slight faulting in the Mc-Kittrick fields which you have referred to?

A. I was over the McKittrick field there. It shows a broken structure. It was evident in passing through. I did not work out the details.

Q. Would you say it was slightly faulted or greatly faulted?

A. My impressions of the McKittrick is that it was rather badly faulted.

Q. Now, passing to the southeast of McKittrick, did you observe the existence of any faults down the dip, or the non-existence of any?

A. I followed down that range of hills in order to satisfy myself whether or not those beds continued into the Elk Hills, whether there was any interruption of the structure between the two; and I endeavored at the same time to reach some approximate idea regarding the depth, that being information which was plainly visible prior to 1904. [587]

Q. Then you did determine, did you,—and that was the question, Mr. Veatch,—that there were no faults in the front to the southeast of McKittrick?

A. To the southeast?

Q. Yes.

A. Just what place?

Q. In any portion of the country that you examined there.

A. There are some faults near McKittrick south and southeast of McKittrick.

Q. Going further south and getting opposite the Elk Hills proper, was there any fault?

A. There is minor faulting.

Q. Did you determine that there was nothing but minor faulting?

A. That was my opinion.

Q. Now, you found oil seepages in the Temblor Range, for what distance?

A. They are shown on this map Exhibit I for about thirty miles, and extend for a still greater distance.

Q. Now, in determining how far the oil horizon extended into the San Joaquin Valley, you inadvertently measured your total distance on the map as fifteen miles. Is that correct?

A. No; I measured it as fifteen inches.

Q. And assumed that that was fifteen miles?

A. Yes, transposing that and stating the matter, I read the fifteen units.

Q. And that threw your oil out into the valley only seven miles and a half?

A. Threw it out seven and a half units.

Q. You testified seven miles and a half?

A. Yes sir; that was an error. I said that the measurement was a matter of fifteen units of one kind, and extending [588] from below Sunset to

above McKittrick. Now, half of that distance would include the Elk Hills.

- Q. Then you corrected that to thirty miles along the axis and fifteen miles out from the axis?
 - A. Yes.
- Q. Now, wasn't that a determination of the existence of oil at a given distance from the range purely by mechanical means, which permitted you to make that sort of an error in your calculation?
- A. Yes. It follows this way: The matter is one of ratio. It is simply to take that map, and the distance is a matter—whatever the true distance on the map is,—which shows on the map, and it shows the proven distance along the outcrop.
- Q. Now, if your proven distance along the outcrop instead of being thirty miles had been five miles only, by the same application of the same law of horizon, your oil would extend out into the San Joaquin Valley two miles and a half? Is that a fact?
 - A. If you can only know-
 - Q. Will you answer my question?
- A. Did I understand you to say that a man knew as a positive fact from the outcrops that there only existed seepages along five miles of territory?
 - Q. Correct.
- A. Then, on that assumption, I would advise simply for that two and a half mile limit as a good proposition. The geologic structure would, however, probably include other areas, and if that geologic structure was very favorable I would also advise drilling there as a less favorable area.

- Q. Now, if I understand your position correctly, I understand that if you have indications of the existence of oil along the Temblor Range for a distance of thirty miles, that [589] you take the center of that outcrop and, it being the center of the general circle, taking the radius of that as half the distance, you swing that out around into the San Joaquin Valley—
 - A. And also back into the hills.
- Q.—and back into the hills—and assume that the oil will probably be out there that distance?
- A. If the geologic structure is favorable. But on that point, it is not favorable to the west of that outcrop for the occurrence of that sand, because the sand is missing and, therefore, that part of the semicircle is valueless. Your geologic conditions show that it is valueless.
- Q. In other words, it is the same as if you put a ladle full of batter upon a hot pan on the stove. It would tend to spread out and approximate a circle, unless it ran up against something?
- A. Well, that may be used as one illustration. Perhaps I can explain that.
 - Q. I think I understand it perfectly.
- A. I would like to explain it to you further. Suppose you have—this is merely one method of arriving at the probability; there are other methods that are quite sufficient—if you have a series of horizontal beds, we will say two thousand or three thousand feet thick, but the thickness is of minor importance

in this matter, and you dig a trench along those horizontal beds, which trench is thirty miles long, and your trench is three thousand feet deep or more; at the bottom of that trench you find sand with oil. Now, I think that a man would be justified on that showing of oil at the bottom of a trench for thirty miles to go fifteen miles on each side of that trench and regard it as good territory, unless there were geologic conditions to preclude the possibility of the oil extending. That applies here in this way: If those hori- [590] -zontal beds are tilted, and you have all the beds removed from one side of the trench, that is to say to the right or left of the trench, there would not be oil on that left-hand side, and that is exactly what occurred here in a general way. The lefthand side of the trench is removed by erosion-all the beds on that side—and you have nothing but the underlying beds below the particular oil horizon that we are discussing. But on the right-hand side, extending off into the side, you have the beds, and on that showing you would be justified in going fifteen miles from the trench as good territory, providing the geologic conditions were favorable.

- Q. Can you mention any occasion when Mr. Arnold or any other geologist familiar with California oil shales has enunciated this pancake theory, as I might term it?
- A. No. It is a matter of probability in stratified deposits. It is used in the classification of coal lands very extensively.

- Q. And you, so far as any publication is concerned, are the pioneer in applying this theory to the California oil fields?
- A. I don't know that it has been applied by anyone else. It is merely one way of illustrating the oil value of those hills. It can be demonstrated entirely without that. Being simply a matter of probability, you know by the exposure—
- Q. I ask you if any other geologist had used this method. I did not ask for any other methods. I will come to them.
- A. You know by the exposure that this is oilbearing for thirty miles, and that exposure indicates the persistence of the beds off into the valley.
- Q. Now, taking your horizon theory or whatever name you may give it, which you admit is new in the oil fields—
- A. It is new stated in that way only. I think it is [591] applied practically many times—the fundamental principles.
- Q. Very well. If there should exist anywhere in this plain that your oil is going to spread out on, an obstruction, your rule would fail, wouldn't it?
- A. That would depend on the method in which your oil sand has been impregnated.
- Q. And if there were no water in the formation it would be one thing while if there were plenty of water in the formation it would be another?
- A. It depends entirely on the manner in which the oil got into the sand.

Q. That is, this rule would apply provided all the other conditions made it possible in a given case?

A. Provided the geologic conditions are so favorable, and they are so favorable here.

Q. And it is not the rule of the occurrence of oil at all, is it?

A. The rule for the occurrence of oil?

Q. Yes. That it will occur in horizons as you have expressed it,

A. I think that the land within that radius determined in that way would have a greater value than the land lying outside.

Q. That is not the question. Is there after all any such rule as the one that you have laid down for determining the oil character of ground recognized by any geologist or any practical oil man? Isn't that practically an inference of your own?

A. No, I should not say so.

Q. Now, I understand you to say that the conclusion reached by you from these outcrops in the Temblor Range does not require any corroboration. Is that correct?

A. As to the value of the Elk Hills for oil territory? [592]

Q. Yes.

A. With the adjoining wells there?

Q. Yes.

A. I think it does not.

Q. You would have been able to reach that con-

clusion in 1904, even if there had not been a well on the Temblor Range?

- A. Right.
- Q. And would have been able to determine the oil value of the Elk Hills in the absence of any development whatever in the Temblor Range?
- A. I should have said they were valuable oil lands. The value would increase when those wells were sunk in the face of the range.
- Q. That is, at this time after you have had the benefit of all your studies since 1904 and have read the bulletins and descriptions of the oil fields in California since 1904, you now venture the opinion that in 1904 even without a well in the outcrop or anywhere along there, you would be able to say that the Elk Hills were valuable for oil?
- A. Without the knowledge I gained, in 1904, if I had been in that range in 1903 or '04, I would have said then that the Elk Hills were good oil territory.
 - Q. And with every assurance of being right?
 - A. I think it is good oil territory, yes.
- Q. Why was it when you went into that territory, Mr. Veatch, to make these examinations, that you sought to place yourself in the attitude of a man in 1904? Who told you to do that?
 - A. Mr. Mills.
- Q. And you religiously endeavored to do that in reaching your conclusions?
 - A. Yes sir.
 - Q. And the conclusions that you have here stated

in your [593] direct examination were stated from the standpoint of a person's knowledge in 1904?

A. Right.

Q. Then, Mr. Veatch, why was it that you testified as follows on page 1374: "I might state that the testimony which I offered this morning was not the report that has been referred to but was my opinion given after hearing all of the witnesses in court and would be based upon much more information than I had at the time that I wrote that report, which was not put in evidence."

A. It is this: That in reaching that conclusion I had the affidavits which you have there, giving seepages at McKittrick and at Sunset and in between, and the seepages in the Elk Hills. I relied upon that statement and the statement of Mr. Youle and Mr. Barrett regarding seepages in between. Now, there was a great deal more detailed information given in the testimony than was given in those statements. You have a great list of references to these statements. My opinion is this: That with the information that I had the conclusion was justified. With the additional information, it is merely corroboration.

Q. Now, Mr. Veatch, was your direct testimony based upon all of the evidence that has been introduced in this case up to the time that you testified, or was it based upon what a man in 1904 would have known or did know? Which is the fact?

A. The fact is, regarding the seepages—we were

discussing the seepages. If I said the whole testimony, it should be restricted. I was talking about nothing but seepages—seepages known prior to January 1st, 1905.

Q. Then you desire to modify that answer that you gave at the end of your direct examination which I read you?

A. That my conclusion is based upon evidence existing [594] prior—seepages known prior to 1905.

Q. Then your conclusions as you announced them were not based on all the evidence, but were based on what was known in 1904? Is that correct?

A. Based upon the seepages and the wells known
 existing, I should say—prior to January 1st, 1905.

Q. Then you did not mean what you said when you replied as follows: "The testimony which I offered this morning was not the report that has been referred to but was my opinion given after hearing all of the witnesses in court and would be based upon much more infomation than I had at the time I wrote that report"?

A. That is a true statement.

Q. Then your opinion and your testimony as given on direct examination prior to the time you made this reply, was based upon all of the evidence received up to that time?

A. All the evidence relating to seepages and to wells.

Q. Did you say seepages when you replied as follows: "The testimony which I offered this morning" —didn't you mean by that all of the testimony which you had given?

A. All my testimony?

Q. Yes.

A. My conclusions?

Q. Yes.

A. Yes.

Q. Then you did not mean merely the seepages?

A. I did mean the seepages. I have explained that to you several times.

Q. Did you mean anything more than the seepages when you answered it?

A. The seepages and the wells. The information—I wish to explain that in going into that region and investigating [595] that region, my whole point has been to place myself in the position that the geologist would have been prior to 1904. The evidence existing on the ground at that time was entirely conclusive.

Q. You have not yet answered my question, and I desire you to pay particular attention to the question. Did you not testify and did you not mean to say in your direct examination that you based your conclusions upon all of the testimony that had been introduced up to the time you testified?

A. What I said is, of course, in evidence there. What I meant, I have explained. It was a matter of the seepages and the wells. That is the only point in the testimony that was of value to me as a geologist in determining what I would have thought.

Q. Did you not reply as follows to this question by Mr. Mills: "Then, in fact, your report is not based upon affidavits and statements? A—It is not; that is, it is not essentially based upon the affidavits. I used some of the affidavits, but if the affidavits had not been at hand and I had simply talked with the witnesses that I did talk to and had the published reports referred to—that is, the field work prior to January 1st, 1905—I would have had sufficient data to form an opinion." Did you so testify?

A. Yes.

Q. Now, the opinion you refer to in that answer was your opinion of the character of the Elk Hills as oil territory?

A. Yes; and in which is naturally understood would be a personal knowledge of the region necessary as to the geologic structure. That, I think, is fairly implied in that answer. If it is not, I should correct it in that respect.

Q. That is, in addition to that, you took into account your personal knowledge of the region? [596]

A. Yes.

Q. And did you not take into account in reaching your opinion and conclusion which you testified to everything that you had ever heard or seen in connection with the territory?

A. No.

Q. Do you think, Mr. Veatch, that you have such control over your mental processes that you can eliminate from your mind information that you have

received concerning a particular territory and can form a conclusion utterly regardless of that information?

- A. I think that is psychologically possible.
- Q. Is it psychologically probable?
- A. I think it is. I think it can be done.
- Q. Do you believe that in the year 1912 and at a time when it is admitted that the knowledge of the geology of the oil fields is much farther advanced than it was in 1904, a man who has had no experience whatever in California oil fields can go into those fields and as the result of an examination made in 1912, and as the result of reading literature concerning those fields, dating both before 1904 and after 1904, can form a fair opinion that would have been formed by a man in 1904 utterly ignorant of what would thereafter be discovered in the ensuing years?
 - A. Yes; and in explaining that I can say that my knowledge—my detailed knowledge of the refinements of the geology in this field today is very meager. I have seen it simply in going over it just as I would have seen it in 1904. I have not these detailed well records. I purposely refused to look at the well records, and the great amount of data and information which is available in this field upon which I could predicate a report now, I have not had and do not know of.
 - Q. In other words, you know very little about the oil [597] territory?

- A. I know what a man would know in 1904.
- Q. Then a man in 1904 would know very little about it?
 - A. No; not at all. I say-
- Q. Now, answer my question. Isn't it a fact that you know very little about the territory?
 - A. I should say I know less than other people.
- Q. Isn't it a fact that in general you know nothing about California oil conditions?
 - A. I should say no to that.
 - Q. You think you know something about it?
 - A. Certainly I do.
 - Q. Have you been in Coalinga?
 - A. I have.
 - Q. In Kern River?
 - A. I have.
 - Q. Have you been in Summerland?
 - A. I have not.
 - Q. What other oil fields have you been in?
 - A. If you ask me I can tell you.
- Q. I wish you would tell me. I may not know them all. I do not pretend to be an oil expert.
- A. I have examined this region about McKittrick carefully enough to form a correct judgment regarding the value of the Elk Hills. I believe the Elk Hills are valuable oil teritory. I am confident that I would have formed that opinion of them if I had examined that territory in 1903 or '04, and I may add that any competent geologist would have reached the same conclusion at that time.

- Q. We will come to that, Mr. Veatch. And, I think, also, that you will add, will you not, that your determination of the oil value of the Elk Hills from the evidence which you have taken [598] into consideration is conclusive?
 - A. As to the oil land, yes. I think it is oil land.
- Q. It is what you would as a scientific man term a conclusive demonstration?
- A. It is conclusive in this: That I would advise a person to acquire that for oil land. I would advise him to drill it as oil land. I would not guarantee that he would get a commercial well. I would not guarantee in a case of coal that it was a commercial proposition from the outcrop.
- Q. You disagree with Professor Branner in that respect?
 - A. In what respect?
 - Q. Coal.
 - A. No; I think not.
 - Q. You heard his testimony?
 - A. I don't know of any contradiction.
 - Q. You don't know of any contradiction between yourself and Dr. Branner in connection with coal?
 - A. I think we are in entire accord.
 - Q. From your recollection of his testimony, you are in entire accord with him?
 - A. He said this-
 - Q. I am not asking you that. From your recollection of his testimony, you know of nothing with which you disagree?

A. I agree with him. There is only a possible point in which there could be any suggestion of a disagreement,—that Dr. Branner said that a geologist could calculate the tonnage of coal in land that had not been developed. I simply say to that that the geologist's calculation as to the tonnage of coal is open to error.

Q. And you would disagree with that in that respect?

A. If that is a disagreement, yes.

- Did you testify in reply to a question by Mr. Mills: [599] "Now, Mr. Veatch, you have spoken of an opinion which you formed of the character of the lands in suit and the adjoining lands in the Elk Hills from certain seepages and from certain other physical evidences of adjoining territory, besides the geological formation of the lands themselves and their relation to these seepages. Did you have, at the time you formed that opinion, all of the seepages which you have collected and given references to in the reporter's transcript at the time you formed that opinion? A-No; only a portion of them. Q-Have these additional seepages tended in any way to change your opinion of the oil character of the lands in suit? A-No; the evidence, without the additions, was to me conclusive, and these would have strengthened it if there had been any doubt." Do you desire to modify that answer?
 - A. No, I think not.
- Q. You think that is a fair statement of your opinion?

- A. Yes.
- Q. Then in your mind, even without the evidence of these additional seepages, there was absolutely no doubt of the character of the Elk Hills as oil land?
 - A. With the qualifications that I have made.
- Q. Did you put any qualifications in when you stated that it would be conclusive and that there would be no doubt?
 - A. There is no doubt that it is oil land.
 - Q. Do you now desire to qualify that?
 - A. No.
- Q. And that conclusion would have been just as certain and just as positive, even if there had been no wells in the Temblor Range or along the Temblor Range in 1904?
- A. No; I think I have testified that from those seepages alone I would have concluded that that was oil land.
 - Q. That is my question. [600]
- A. With the additions of the wells it increases the value of the oil land.
- Q. Did you not testify as follows at page 1354 of the transcript, in answer to this question: "Q—Are there any other evidences which would in any wise corroborate the prediction of oil in the Elk Hills you have stated? A—If any corroboration were needed with regard to the line of evidence outlined, it is found in the seepages in the Buena Vista Hills and in the Elk Hills; and any questions which might arise with regard to the persistence of the oil,

as shown by these seepages, are conclusively set aside by a great series of wells which had been sunk prior to 1904 down the dip from these seepages, and connecting, showing that the seepages represented oil in commercial quantities." You so testified, did you not?

A. If you read it correctly, I did.

Q. I have, Mr. Veatch.

A. You cannot expect me to remember exactly the words I used.

Q. Do you desire to modify that answer at this time?

A. No.

Q. Then, even without the knowledge of any well, your conclusion would have been just the same and without doubt?

A. I said it would be oil land and would advise the acquisition for oil land. I said it would be more valuable as oil land if the wells were sunk. There is a whole series of factors which show to me without any doubt that that is good oil territory.

Q. Then you recognized when you gave your testimony on direct examination and recognize now that it is possibly necessary that there be some drilling to determine whether land is commercially valuable for oil?

A. Oh, yes. [601]

Q. And that would be true of the Elk Hills?

A. Yes. Just as in a coal mine you would have to mine your coal before you knew it was commercial.

- Q. Did I ask you anything about coal mines?
- A. I merely offered that as an explanation.
- Q. Now, without any corroboration of the oil wells and seepages, would you have termed the Elk Hills proven oil lands?
 - A. No.
- Q. Did you not testify as follows on page 1353, after explaining what has been termed here the horizon theory—
 - A. By you.
- Q. I believe you called it that. I call it the pancake theory. "Applying this distance of seven and a half miles from the outcrop, it includes the Buena Vista Hills and the Elk Hills—"of course, you mean to correct that to 15 miles—"and the Elk Hills, and the only question which could remain regarding the oil value of the territory outlined in this way would be with respect to the synclinal areas, the valley lying between the Elk Hills and Buena Vista and Mc-Kittrick Hills and the valley lying between the Buena Vista Hills and the outcrop along the front of the range. Both the Buena Vista Hills and the Elk Hills fall within the proven area from geologic determinations."
 - A. Yes.
 - Q. And you do not desire to modify that?
 - A. No.
 - Q. Then after you had examined your seepages in the Temblor Range for that distance of 30 miles, and applied your 15-mile horizon, the only question

that remained as to the oil value would be as to the syncline?

A. That would be oil land. I have testified frequently, and I think you saw the relation, that I would consider that [602] oil land and that I would advise a man—that I considered it to be demonstrated geologically that that was a good oil proposition and that I would advise a man to drill it and buy it; but I would not guarantee that he would get commercial oil.

Q. What did you mean by saying that the only question that could remain regarding the oil value of the territory would be in the syncline?

A. Just as I have explained.

Q. You do not mean value, then, when you use that word?

A. I think so. The value of oil land—oil land has value which has no well and which has not been proven in the sense of proving it by a well. But it is a common commercial transaction to sell land and pay an oil-land price for it where there is not a single well on the land and which is not proven in that way.

Q. Sold for speculative purposes?

A. Sold as a business proposition.

Q. When you used the term "value", you meant something upon which you could locate a claim and possibly sell it?

A. No; not locate a claim.

Q. Did you mean when you used the word "value"—

- A. A commercial value as an oil proposition.
- Q. Oil could be produced in paying quantities?
- A. No.
- Q. Then you used the word "value" having some other definition in mind, did you?
- A. I used it as having a value as oil land,—having a commercial value as an oil property.

Mr. Mills—I object to this and submit that the question has been fully answered by the witness twice.

Mr. Lewers-It is not answered yet.

- Q. Did you mean when you used the word "value" in that [603] connection at page 1353, that it contained oil enough to add to its richness?
 - A. I believed it did.
 - Q. Did you know that it did?
- A. No; I did not know that it did. That was my opinion as a geologist.
- Q. Could you determine in any way that it contained sufficient oil to add to its richness? That is, that the oil could be extracted at a profit of even one mill on a thousand tons?
 - A. That cannot be determined.
- Q. And when you used the word "value" you didn't mean that?
 - A. I meant it had value as oil land.
- Q. Now, Mr. Veatch, haven't you known a great many lode claims to sell at quite a considerable price per acre that did not have a blessed thing in them?
 - A. I think that statement is probably true, but

lode mining and oil mining are entirely different things. There is a much greater certainty in a petroleum proposition than there is in any lode mining, as Dr. Branner said, and I agree with him perfectly where he regards coal mining and oil mining the most certain forms of mining. As I explained the other day, I do not regard any business proposition as a certainty.

Q. Then when you all the way through your testimony speak of this being proven oil land or valuable oil land, you nowhere mean to be understood as saying that there is sufficient oil there that it can be extracted with profit?

A. No; I mean that a man would be justified in buying that, perhaps, and paying an enhanced value because of its oil value, and spending money in developing it.

Q. Let me ask you this question: Suppose that you had in the vicinity of a proven oil territory—say near Coalinga—[604] in a section of land in which there was a paying well, and within three-quarters of a mile or less than a mile of that paying well in a formation which was favorable for the accumulation of oil, an oil spring from which there seeped a few drops of oil or petroleum, and the general surrounding geological formation was such as scientific research and practical experience had shown to be likely to yield oil in paying quantities: Would you pronounce that ground or claim where this oil spring was situated, oil land?

A. See if I get your question perfectly. You want to know whether I would consider the land on which the seepage is situated, down the dip from which there is a commercial well, as oil land?

Q. Yes.

A. I would not, on just the simple statement that you make.

Q. Why not?

A. Your seepage is at the point, I assume from your question—it is at the point where the beds come to the surface, and you would then—

Q. No; I have not stated that the beds come to the surface. I said there was an oil spring.

A. I asked you the question if it was down the dip from the spring, and you said it was.

Q. I misunderstood you then. Take the statement as I have given: That there was an oil seepage shown in the land, that the formation was favorable to the development of oil according to scientific research and experience, and that it is within a mile of a paying well, and apparently situated in the same formations.

A. I would have to examine the ground in order to answer that question intelligently.

Q. Are you able to state? [605]

A. It would be possible to have good ground there, and it would also be possible to have ground no good.

Q. Would you from that statement call that oil

A. No; I would have to examine the ground. I believe after I examined the ground that I could give you an opinion that would be worth something.

Whereupon the further taking of testimony herein was adjourned until 2:30 o'clock P. M. at the same place.

On Monday, May 13, 1912, at 2:30 o'clock P. M. the further taking of testimony herein was resumed.

By Mr. Lewers:

- Q. Suppose that you discovered at the point where this oil spring was, indications of an anticlinal structure, and with favorable indications as to the possibility of the accumulation of oil in case oil were underneath, and all the other conditions remained as I have given. Would you call that valuable oil land?
 - A. The seepage is on top of the anticline?
 - Q. Yes; or near the top.
 - A. And the anticline is not broken?
 - Q. So far as appears on the surface, no.
- A. That is, you restrict that to a definite locality and not to a general proposition?
- Q. The question was whether the land where that oil seep was situated and in the vicinity thereof would be called valuable oil land?
- A. I would have to examine it to give you an opinion.
- Q. Then from the data which I have given you in my question you would be unable to give an opinion as to whether it was val [606] uable oil land?
 - A. Supposing that your data was absolutely com-

plete, I could give you an opinion. That is, if I would have knowledge of the persistence of porous beds in that region. Can you give me any information?

Q. I have stated that the situation was such that the structure and formation was such that competent, experienced geologists would say that it was favorable for the production of oil in paying quantities at that point.

A. I would have to see the land to give you an opinion.

Q. Then you would not be willing with that amount of information to say that that was valuable oil land?

A. Not unless I checked it myself.

Q. You would necessarily have to check every item that went into the determination of the character of that land for oil values, wouldn't you?

A. That would depend on who was the authority for your statement as to the character of the beds.

Q. I am assuming in my question that it is established by the most competent authority that the structure of the formation is suitable for the storage of oil, and that the nature of the formation indicates that it is favorable for the production of oil in paying quantities.

Mr. Mills—I object to any further cross-examination of a purely speculative character concerning which there is no relation either obvious or apparent to the issues involved in this case.

A. I can answer that directly with regard to the

Elk Hills. There is an anticlinal structure there. There is a seepage.

- Q. By Mr. Lewers—I didn't ask you about the Elk Hills, and will you kindly answer my questions and not one that you frame yourself? [607]
- A. I can answer it if you will assure me that the conditions are absolutely the same as in the Elk Hills,—making it absolutely parallel to the conditions existing in the Elk Hills.
- Q. That is, you are not able to pass any opinion that is not identical with the conditions in the Elk Hills?
- A. Not at all. But the conditions that you have mentioned seem to me analagous to the conditions of the Elk Hills, and I merely want to make sure that they are.
- Q. Taking just the conditions as I have given them to you, are you able with the data which are contained in my question, assuming that it is all absolutely proven, to determine whether that land in the vicinity of that oil spring is valuable oil land or not?
 - A. I would have to see it.
- Q. You could not determine it from the data contained in my question.
 - A. I could determine it from complete data.
- Q. Answer my question. You cannot determine it from the data which I gave you?
- A. I say yes, if the conditions are the same as in the Elk Hills.

- Q. That is, you would-
- A. I know the conditions in the Elk Hills.
- Q. That is, you want something additional to what I have stated in order to determine its mineral value?
 - A. I explained that.
- Q. Answer my question. I don't care for the explanation till I get an answer.
- A. I would say that I can answer it if the conditions are the same as in the Elk Hills, namely, that you have an anticlinal structure—
- Q. Mr. Veatch, I have given you the conditions and I am not [608] proposing any other conditions, and I am not comparing it with the Elk Hills. I am asking you merely this question: With the information and data which I furnished you in those questions, and without additional information and data, can you answer that question as to its oil value?
 - A. I think I could answer that question.
- Q. What is your answer as to its oil value with that data alone?
- A. I am not at all sure of the data. You assume that the data are correct. I don't know that they are correct.
- Q. But we are assuming that it is correct for the purposes of this question. Now, can you answer it?
- A. I can say that taking the conditions which existed in the Elk Hills, which I think are similar to the ones that you frame, namely, that there is a dome-shaped anticlinical fold upon which there is

evidence of a seepage where the beds are slightly cracked, no great faulting, and where in the adjoining region you have a long line of outcropping with seepages and with wells proving the character of the land, I should say that that is oil land.

Q. Mr. Veatch, is it impossible for you in this instance to maintain that necessary control over your mental faculties that will disassociate my statement of facts from any additional facts that you may have in mind concerning the Elk Hills?

Mr. Mills—I object to that question and any further question of that kind because the witness has endeavored repeatedly to give you an answer to your question. Moreover, the questions are wholly irrelevant to any issues in this case, and I insist that counsel shall keep within the issues.

Mr. Lewers—I shall keep after this question till I get an answer one way or the other to my question.

A. You assume—let me get this straight. You assume [609] conditions existing at a given locality which I know nothing about. If you ask me a purely hypothetical question without reference to any locality which I have not examined, I can inform you whether the criteria are sufficient.

Q. Now, can you state whether, assuming the conditions which I have outlined in my question are absolutely true, and disassociating those conditions from anything in the Elk Hills, so far as adding any additional data, can you say whether upon the information contained in my question that land was valuable oil land or not?

A. How persistent are the porous beds in your question?

Q. Take my question just as it stands.

Mr. Mills—You had better read the question.

(Question beginning on line 12 page 1530 was read by the reporter.)

A. I would have to have more information.

Q. By Mr. Lewers—Then with that information contained in the question you are unable to determine whether it is oil land or not?

A. Yes; for the reason that I don't know what may be in your mind when you say competent oil men would say that would be good territory.

Q. Then it is necessary, is it not, Mr. Veatch, before you can determine even what you designate as the oil value of land, to have more data than merely seepages and surface structure?

A. No, I think not.

Q. Then you are unwilling to venture any opinion except as to the Elk Hills?

A. No; I said if you would state the conditions fully. I ask for a fuller statement of the conditions, and you referred me to your original question which I think is not complete. [610] I cannot predicate an answer on any incomplete state of facts.

Q. Now, you testified that the safety of the conclusion which might be reached by the geologist from the data which you took into consideration depended solely upon the accuracy of the observations. Is that correct?

- A. I think that is a large factor.
- Q. Does it not depend also very largely upon what he sees?
- A. It certainly does; the accuracy of his observa-
- Q. However accurate his observations may be, his data may not be sufficient?
 - A. That is possible.
- Q. Now, did you determine from your own investigations in what formation the oil originates in the Devil's Den District to the northwest of McKittrick?
 - A. No.
- Q. Did you determine in what formation the oil originates in the Temblor District to the northwest of McKittrick?
 - A. No.
- Q. Did you determine in what formation the oil originates in the McKittrick District?
- A. I believe that it comes from the diatomaceous beds—
- Q. I didn't ask you what you believe. Did you determine from any observation of your own?
- A. I did not prove it. I think it is a fair deduction. I think no one has proven it.
 - Q. It comes from what?
 - A. It is a deduction.
 - Q. What formation did you say it came from?
 - Diatomaceous shales.
 - Q. What period?

A. It makes no difference what the period is.

Q. That may be, but I want to know what period it comes from. [611]

A. It comes from the diatomaceous shales, in my opinion, that lie west from McKittrick.

Q. But of what period?

A. I think that makes no difference, and I made no determination of the age. There is a series of diatomaceous beds. The conditions with reference to the accumulation of oil would be the same regardless of the age of that bed.

Q. Did you make any determination as to which formation originated the oil southeast of McKittrick District—in the Midway?

A. Yes; I think the diatomaceous shales there also are responsible.

Q. Of what period?

A. The same as in the McKittrick region.

Q. Which period?

A. It is the diatomaceous shales which underlie the oil-beds containing the sands.

Q. But which period?

A. I have stated that makes no difference. We have there in the Temblor Range a series of diatomaceous shales. The age of those diatomaceous shales is of no particular economic importance in the determination of the oil value of lands in that region. Above that diatomaceous series there lies a series of porous beds. The age of those beds that overlie it is immaterial. They are younger than the diatomaceous shales.

- Q. Your opinion on that matter is likewise immaterial to me. I want to know if you determined, immaterial or not, what formation at McKittrick originated the oil?
 - A. The diatomaceous shales, I believe.
 - Q. Of which period?
- A. I did not determine the period. It is, as I say, of no special economic bearing. [612]
 - Q. You did not determine the period?
 - A. I did not.
- Q. And you did not determine the period at any other place?
 - A. No.
- Q. Did you find anything which you determined belonged to what is known as the Vaqueros formation?
- A. I found certain beds which have been correlated with the Vaqueros.
- Q. And did you find certain beds which have been termed Monterey beds?
 - A. Yes.
 - Q. And Santa Margarita beds?
- A. No; I found none. I think the correlation of the Santa Margarita is doubtful. But that is mere opinion. The outlines of the geology there in the way to affect the economic factors involved—
 - Q. Answer my questions and do not volunteer.
 - Mr. Mills-Let him finish his answer.
 - Mr. Lewers—He wants to make a legal argument.
 - A. I am merely explaining it from a purely scien-

series of porous beds which have sometimes been called the Vaqueros. Whether they are Vaqueros or, not is a matter of scientific correlation on which there might be differences of opinion. But, whatever they may be called, there is this first member of porous beds. Above that there is a series of diatomaceous shales which may or may not represent the Monterey as it is correlated at other places. Above that is a third member of porous beds. Now, the ages of those have no special economic importance. It is this diatomaceous shale which probably yields the oil. It has the overlying and underlying porous beds which afford a reservoir. [613]

Mr. Lewers—Now, I move that the entire latter portion of the answer be stricken out as not responsive.

- Q. Mr. Veatch, does the oil producing diatomaceous shale in the Temblor District lie in a Monterey formation or in some other formation?
 - A. I don't know.
 - Q. You made no effort to determine?
 - A. No.
 - Q. You regarded that as unimportant?
 - A. Yes.
 - Q. And is it not a fact that the oil formation in the Temblor District is in the Vaqueros sandstone?
 - A. I don't know that. I think that it lies in the lower member of these three that I mentioned. You can call them any name you please. If you mean by

your name "Vaqueros" that lower porous bed, I say yes. It is a matter of correlation, as you apply the names. Scientists often discuss the matter at great length without materially changing the actual sequence. It is simply a quibble over names.

Q. Let us take Mr. Arnold's classification contained in Bulletin No. 406. Have you that before you? Is it or is it not a fact that in the Temblor District the oil migrated downward or upward?

A. From what I have read I should say they migrated into the porous beds underlying the diatomaceous shales.

Q. Underlying the Vaqueros or on top of the Vaqueros?

A. I am simply talking about the sequence of beds; not by formation names. The correlation of the Vaqueros involves a large amount of field work, and I am not prepared to say whether that is or is not Vaqueros.

Q. Then you don't know whether the oil migrated downward into the formation underlying the Vaqueros or into the formation [614] overlying it?

A. It migrated in both directions. It is in the beds underlying the diatomaceous shales, and also the ones overlying them.

Q. Did you determine that they migrated upwards in the Temblor District—

A. I said I had not been in that district.

Q. As a matter of fact, you don't know, do you?

A. No.

- Q. You don't know whether the oil source in the Temblor District was from the lower Vaqueros, the lower Monterey or the upper Monterey, do you?
- A. If you will specify that in what natural sequence of beds they are, and leave out the question of names, I think I can express an opinion. It is simply a sequence of beds there, and the question of names which you have involved in the technical description, has no economic bearing.
- Q. Is there the same sequence of beds in the Temblor District and in the McKittrick District?
- A. I say yes, that general sequence is there. A porous bed below the diatomaceous shales, and a porous bed above the diatomaceous shales. There is also some lower beds I understand.
- Q. Wouldn't it be of some importance to you as a geologist to know whether or not the oil shales producing the oil lie underneath the Vaqueros or on top of the Monterey in determining the economic value of any particular piece of land under which those two formations occur?
- A. I should say not directly so. For this reason: That in a great many oil accumulations your cil is not in the bed in contact with the source itself,—an entirely different bed—and it is a matter of determination of the persistence and character of this porous layer. The porous layer involved here is the one that lies above a series of diatomaceous shales. [615] Whether they are or are not the source of the oil bears only indirectly on it. I think the fact that they

probably are the sources of the oil makes this all the more valuable territory.

- Q. Then you did not determine what was the source of the oil at McKittrick?
- A. No. I think no one has determined that. It is a matter of belief with me that it comes from those diatomaceous shales.
- Q. Would it be a matter of any consequence with you whatever in your conclusions about the Elk Hills, whether the producing formation lay immediately in the overlying McKittrick or was buried under immense thicknesses of shale of an earlier period below?
 - A. An earlier period than what?
 - Q. The McKittrick?
- A. I have not said it was in the McKittrick. It was in the upper porous layer. If you will refer to it by using that name, I will answer you.
- Q. If you will listen to my question: Does it make any difference to you in reaching a determination in what you call the oil value of the Elk Hills whether the diatomaceous shales producing the oil immediately underlies the McKittrick formation or were buried still deeper under an immense thickness of shales of another formation?
- A. What do you mean by the McKittrick formation?
- Q. Are you not familiar with what is meant by the McKittrick formation?
 - A. Scientists may differ as to just what "McKit-

trick" includes. And I want to know what you mean by McKittrick.

Q. In these questions I am basing my questions on Mr. Arnold's classification.

A. If Mr. Arnold includes—and that I am not entirely sure [616] of from his paper—all the porous beds above the diatomaceous shales in the McKittrick, I should say that I understand that. But if as indicated probably by his separation of the Santa Margarita with a question-mark, in which there is some porous beds, I would include all those porous beds together in my porous layer over the diatomaceous shales. It may be that Arnold intended to exclude from his McKittrick those porous beds which you might call Santa Margarita. If he did, I am using "McKittrick" in a larger sense. I am using it for the topmost of this simple three-part series of the formation in that region.

Q. Now, coming back to your horizon theory. Would it make any difference in your conclusion as to the extent of that horizon if at one end of your outcrop the oil-producing shales belonged to an older formation—say the Tejon formation—and a few miles away the oil-producing shale belonged to a later formation—the Vaqueros; and a few miles away on the same outcrop the oil-producing shale belonged to the Monterey; and these various formations from the indications on the outcrop were each of considerable thickness?

A. I should be unable to answer your question

because I don't know what you mean by "formation." There are various scientific meanings to the word "formation."

Q. Then when I refer to the Monterey formation or to the Tejon formation or to the Vaqueros formation, and I explain to you that I am using those terms on the basis of Mr. Arnold's classification, you don't know what I mean?

A. I will ask you if you use them in their time significance or their formation significance?

Q. I am using them in either significance that you desire.

A. If you use them in the formation significance, all the formations which you mention would be one formation; a formation may go over several periods.

[617]

- Q. You have made no mistake in that answer?
- A. None whatever.
- Q. You are perfectly satisfied with it?
- A. Yes.
- Q. Then if it is used in what you call the formation significance—
 - A. With some scientists.
 - Q. —the horizon rule still applies?
- A. The horizon rule relates to the porous beds only.
- Q. If you had at the Temblor Range an oil-producing shale, an oil-originating shale, in the Vaqueros formation, would you conclude that it would occupy the same plane of horizon in its extensions

underneath the surrounding country as the oil-originating shale in the later Monterey, 20 miles to the south along the Temblor Range?

A. The question is difficult to answer because I don't know what you mean by Vaqueros formation. Do you mean the porous beds below the diatomaceous shales?

- Q. I have explained to you, and I am surprised that you do not understand me, Mr. Veatch, that by Vaqueros formation I am using exactly the classification of those formations made by Ralph Arnold. Do you understand his classification?
- A. I can't say that I do fully. I have not gone through his report with minute care to work out the refined questions of formation names. The main stratigraphy of this region appeals to me as being very simple, and so far as relates to the economic problems, as I explained before, it consists of three parts: The porous beds below, a great thickness of diatomaceous shales which I regard as probably the source of the oil, and a great series of porous beds above. Now, the oil produced in these diatomaceous shales may accumulate in the porous beds above. [618]
- Q. Then if you don't understand Mr. Arnold's classification, let me ask you this question: Is the surface formation at the Temblor Ranch of the same age as the surface formation in the Elk Hills?
 - A. I don't know.
- Q. Is it not a fact that it is a very much earlier age?

A. I made no examination of that region in connection with an examination to determine the value of the Elk Hills, but I can say that I believe that the oil at the Temblor Range, comes from porous beds below this diatomaceous shale series, but I state that simply on information.

Q. You have stated that at numerous times. Can you state from your examination or any information that you have that the oil-producing shales which you find at the Temblor Ranch are of the same age as the oil-producing shales at McKittrick?

A. I should say not, though they probably apply to the same period of time.

Q. That is, they probably belong to the Tertiary, you mean, or do they?

A. I think they do. They may be cretaceous. The matter of whether they are cretaceous or Tertiary, or whether the Monterey shale is cretaceous or Tertiary, makes no difference in the economic conclusion reached.

Q. Suppose that the oil-producing shales at the Temblor Ranch belong to the lower Vaqueros, an earlier formation according to Mr. Arnold's classification than the Monterey, and suppose that that formation which contained the oil was laid down by sedimentation over a large area, extending down beyond the Elk Hills, in the Temblor Ranch, and suppose that later on there were deposited large beds through thousands and thousands of years of the Vaqueros, and then of the Santa Margarita—not of the Santa

Margarita—then of the Monterey, and that in [619] this later Monterey deposit there again occurs a bed of diatomaceous oil-producing shale: Would the same well that tapped the oil shale in the lower Vaqueros drain this other oil shale in the Monterey?

A. You have not explained what portion of the Vaqueros, if at all, this is in. If the Vaqueros is above the sandstone, this shale would belong to something else. Is the Vaqueros a time significance or a formation significance?

Q. The lower shales of the Vaqueros formation—a time significance.

A. You have below the three-part series here another shale?

Q. Yes.

A. I should not say that that shale would affect the upper member of the series, except under very unusual conditions.

Q. Then you have two separate oil sands, one lying above the other, wouldn't you?

A. Yes.

Q. Now, if those should be tilted so that up at the Temblor Ranch the lower one came to the surface and down at the Elk Hills or the McKittrick, I mean, the higher one came to the surface, so that their outcrop was on the same general level, would your oil zone theory apply?

A. With reference to what?

Q. Both of them. Could you lump them together in one determination?

A. You would determine on each sand. You are assuming as a proven fact that the oil comes from these shales. I think that is probably true; but the thing that we are dealing with is the extent and persistence of certain porous beds which are the commercial containers of the oil. If you take at the Temblor Ranch an outcrop of porous sand and you trace that porous sand with a certain persistence, and you find [620] that it shows oil springs all along, you would use the same method there and would apply the same method. But when you get up to the upper porous beds, you are dealing with an entirely different porous series. There would be the persistence of that porous series and the oil contents as shown by the oil seepages and springs and the wells drilled prior to a given date, if you want to determine the conclusion which would be reached at a given time.

- Q. Then you would have to deal with each period of oil shales by itself?
 - A. I am dealing only with the containing sands.
 - Q. Dealing only with the reservoir?
 - A. Yes.
- Q. I am asking you with reference to the oil-producing shales.
 - A. What do you wish to know about the shales?
- Q. This is what I wish to know: If you find indications of oil-producing shales along a distance in line for twenty-five or thirty miles, can you conclude from that that at a distance of fifteen miles to

the side that the same bed of oil-producing shale is existent?

- A. It would depend on the stratigraphic conditions which exist there. I should say, taking an application to this matter, that you have this diatomaceous series exposed for many miles along the Temblor Range, and that in my opinion it certainly underlies the Elk Hills.
- Q. Now, Mr. Veatch, basing your answer upon all you have read, all you have seen, all that you have heard, will you tell me what is underneath the Elk Hills?
- A. I think there is a series of porous beds of this Tertiary class which marks the upper portion of the series; but below that there is a series of diatomaceous beds, and below [621] that there is a series of limestone and amorphous sediments which probably belong to the cretaceous and below that probably granite.
 - Q. Do you know that?
 - A. You asked me what I believe.
 - Q. Do you know it, I ask you now?
 - A. I believe that it is there.
 - Q. Do you know it?
 - A. It is a question of how you define "know."
- Q. How thick is the overlying McKittrick formation? I am using that term as Mr. Arnold used it in the Elk Hills.
- A. I can't answer that because I am not exactly sure what he means by the word "McKittrick." If

you will explain exactly what you mean, I can answer you.

Q. I suggest we take a recess to enable Mr. Veatch to look over Mr. Arnold's book to understand the terms.

Mr. Mills—I would suggest that counsel during the recess occupy his mind by defining exactly what Mr. Arnold means, so that he can intelligently interrogate the witness.

Mr. Lewers-I think I have a very good understanding.

- Q. Then you don't understand Mr. Arnold's classification, do you?
- A. I am not entirely sure regarding certain of his correlations. It involves a definition of formation names, and the matter of formation names, it is notorious, different people can disagree on. If we get down to the simple question of what the sequence is here, without the question of names,—but call it one, two, three—there would be no room for doubt.
- Q. Now, Mr. Veatch, where did you at any point opposite the Elk Hills find any outcrop of diatomaceous shales?
- A. I think a number in the McKittrick uplift there.
- Q. Is the McKittrick uplift opposite the Elk Hills?
 - A. I should think so. [622]
- Q. Is not the McKittrick uplift to the northwest of the Elk Hills?

- A. Just what do you mean by "opposite"?
- Q. Take the axis of the Elk Hills and run a line parallel to that axis. Will it strike anywhere near McKittrick from the center of that axis?
- A. Take the axis of the Elk Hills and run a line parallel to it? You can get an infinite number of parallel lines to it.
 - Q. Perpendicular.
 - A. From what point?
 - Q. From the center of the axis of the Elk Hills.
- A. You mean from the center of the Elk Hills? The central point on the axis of the Elk Hills?
 - Q. Yes.
 - A. It will strike somewhere near Midway.
- Q. Did you find any outcrop of diatomaceous shale near Midway?
 - A. I think there are in the hills there.
 - Q. Did you find any?
- A. Yes; I was in there. To say positively that there was diatomaceous shale, would require a microscopic observation.
 - Q. Did you make any?
 - A. I did not.
- Q. Then you don't know whether there is diatomaceous shale there or not?
 - A. No.
- Q. Did you find any diatomaceous shale at Mc-Kittrick?
 - A. What I believed to be.
- Q. Did you make any test to determine whether it was or not?

- A. No.
- Q. Then you don't know whether it was or not? [623]
 - A. No.
- Q. Didn't it occur to you that in reaching a determination as to the thickness of the outcrop and the character of the shales that a microscopic examination might have some bearing?
- A. It would have nothing to do with the thickness of the outcrop.
- Q. Did it not occur to you that it might have something to do with the character of the outcrop?
- A. No; the character of the outcrop would be the same, whether you made a microscopic examination or not.
 - Q. You wouldn't know what it was?
- A. I might suspect it with a hand lens. I wouldn't know it positively.
 - Q. Did you suspect it?
 - A. I think so.
 - Q. Did you look at it with a hand lens?
 - A. Yes sir.
- Q. And concluded that it was a diatomaceous bed?
 - A. That was my feeling.
 - Q. How thick was it?
- A. Do you mean the whole series, or at McKittrick, or in the range or where?
 - Q. From McKittrick southeast.
 - A. I simply drove into the hills there to get a

general idea of the thickness, and my impression from the sections that I saw was that it was in excess of three thousand feet. I didn't think it was necessary to make a detailed section to determine exactly what the thickness was. I have measured a great many sections and think that I can estimate the thickness without making a detailed observation to approximate the thickness within a reasonable degree.

- Q. And you did approximate it to be three thousand feet? [624]
- A. Yes; I thought it was in excess of three thousand feet.
 - Q. What was the direction of the dip?
- A. The Temblor Range is badly folded. There are different sections dipping east, different sections dipping west. But taking those sections that were exposed, that was my opinion regarding the general thickness of the series.
 - Q. I asked what was the dip.
 - A. I said it was very variable.
- Q. Was the dip toward the Elk Hills or away from them?
 - A. At what point?
- Q. At any point along the Temblor Range opposite the Elk Hills.
 - A. In general it is dipping toward the Elk Hills.
 - Q. At what angle?
- A. It is quite variable. I should say it runs from 10 to 60 degrees.

- Q. Did you make any determination of the thickness of the formation overlying this three thousand feet of shale that you found?
 - A. Yes.
 - Q. What did you approximate that to be?
- A. I thought it was over three thousand feet. Certainly over twenty-five hundred feet.
- Q. Now, if that same relative condition continued under the Elk Hills, and if the diatomaceous shale producing the oil is on the lower portion of that shale formation, it would be over six thousand feet below the surface, wouldn't it?
 - A. Assuming your assumptions to be correct.
- Q. Did you make any determination at that time when you placed yourself in the attitude of a man in 1904 as to how deep that man of 1904 would have his client to sink a well?
- A. My belief is that it would be over three thousand feet. [625]
- Q. And he would be still three thousand feet above the oil if it was in the underlying portions of the shale formation?
- A. The oil reservoir is not in the shale, as I have explained repeatedly. I would not advise him to drill for the shale. It is in the porous beds overlying the shale.
- Q. If it is originated in the shale at the bottom of that 3000-foot section, how would it get into the sands on top of that 3000-foot section?
 - A. Is that a purely hypothetical question?

Q. I think this is all hypothetical.

A. Just as a matter of hypothesis, if you have a source which is separated from a reservoir by a thickness of bed, the oil could migrate into the porous beds by a faulty condition of the overlying beds. It could migrate into the porous beds by the overlap of the edge of the porous beds onto the lower beds of the series. There are a number of ways in which it could reach that.

Q. Do you know from your observations whether that formation underlying the Elk Hills is faulted?

A. No, but I suspect that there may be minor faults in it.

Q. That is merely suspicion?

A. Based on the general stratigraphy of the condition. I am referring now only to the diatomaceous shales. I do not believe that the porous beds are faulted—the oil reservoir.

Q. You have no way, have you in advance of drilling, to determine the conditions of the underlying shales?

A. You can have an idea of it which I think would be worthy of some consideration by the general geologic conditions of the country. The geologic history of the region would lead you to form certain conclusions.

Q. Do you agree with the theory of Mr. W. E. Youle that the overlying or surface formation near the outcrop at McKittrick is [626] much thinner than it is to the northeast of McKittrick?

A. The northeast is a very general feature. But taking near the outcrop of the McKittrick, you would have the McKittrick starting at nothing and gradually increasing in thickness. Now, taking the point where it is nothing, or a thousand feet, would certainly be less than where it is in inbed.

Q. How would you determine that this overlying formation which Mr. Arnold has called McKittrick is three thousand feet thick?

A. By the sections along the southeast of Mc-Kittrick.

Q. Have you made any sketch of those sections?

A. No.

Q. Have you made any statement of those sections to show what they are composed of or where they are?

A. Yes; I have a field map that I made at the time.

Q. Now, suppose that instead of the oil being derived from any portion of that shale outcrop which you saw near McKittrick, it were derived from an older and underlying formation. That would add to the distance, would it not, through which the oil would have to percolate to get into the sand beds within reach in the Elk Hills?

A. Yes.

Q. Did you determine whether the oil formation—I mean by that the oil-producing diatomaceous shales—lay in that bed which you estimated was three thousand feet deep, or whether it lay below that?

- A. No; I did not.
- Q. Could you so determine?
- A. Assuming in the first place that the oil comes from the diatomaceous shale, I believe that is correct, and I should say from that that it would come from the whole series of diatomaceous shales. And your whole thickness then would be the source [627] of the oil. The matter involved here is the persistent character of this porous bed.
- Q. Then I take it, Mr. Veatch, that you don't know from having seen it anywhere on the ground, what Mr. Arnold calls Monterey shales?
- A. I have seen a great many diatomaceous shales there.
- Q. Do you know what Mr. Arnold calls diatomaceous shales?
- A. I have seen some beds that he has mapped as diatomaceous shales.
 - Q. Is all diatomaceous shale oil-producing?
 - A. I do not know that it is.
 - Q. You know that it is not, don't you?
 - A. I can imagine conditions.
- Q. Under what conditions will diatomaceous shale not produce oil?
 - A. I don't know. I wish I did.
- Q. It is a very common thing to find diatomaceous shale closely resembling what Mr. Arnold calls diatomaceous shale that does not produce oil, is it not?
 - A. I cannot say that it is a common thing.
- Q. Do you know of any instance where such shale occurs that has not produced oil?

- A. Not of my own knowledge. I know that there are diatomaceous beds in a great many formations which are not producing oil.
- Q. Now, suppose that you had a bed of shale which you claim to be of the thickness which you estimated this shale to be, 3000 feet. Is that shale in the absence of crushing or fracturing pervious for oil through its entire thickness?
 - A. It might be
 - Q. Is it ordinarily so?
- A. You mean the shales absolutely the same as this material [628] in the hills of McKittrick?
 - Q. Yes.
- A. Portions of that are very porous or pervious,I think. There may be portions that are not.
- Q. Are there not laminations or layers, if you want to put it that way, occurring in the deposit of shale of that kind that are very hard?
 - A. They may be very hard and still be pervious.
 - Q. And they may be hard and impervious?
 - A. Yes sir.
- Q. And they might be soft and still be impervious?
 - A. Yes. That is, relatively impervious.
- Q. Then you would find it necessary, would you not, before you can determine that at a given point or in a given area there existed oil in appreciable quantities, that you have, first, shales which produce oil and, second, a reservoir of some kind connected with those shales in which the oil would pass?

- A. Not universally, at all.
- Q. What other conditions would you have?
- A. You assume that all the oils come from shales, which I am not at all sure is true. You frequently have large oil pools on different parts of the world which are not connected with diatomaceous shale, and in which the source of the oil is very obscure, and in which the economic factors are the determination of the persistence of the porous beds.
- Q. I am referring to California and, particularly, to the McKittrick district. Can you answer the question in connection with that?
- A. Believing as I do that the oil here is derived from those diatomaceous shales, the thickness of the shales is a measure, in one way, for reaching a conclusion—or a factor, I should say, in reaching a conclusion regarding the oil value [629] of the land. In that respect the very great thickness of the diatomaceous shales of this locality is of special importance, assuming as you do that they are the source of the oil.
- Q. And assuming also that the entire thickness of the shales produces oil?
- A. I think so. It would be most difficult from a scientific standpoint to disprove that any portion did produce oil.
- Q. Now, Mr. Veatch, one of the essentials would be some thickness of diatomaceous oil-producing shale, would it not?
- A. Under the land or in the neighborhood of the land?

- Q. Somewhere.
- A. Yes, if the shale is the source of the oil.
- Q. Assuming that the shale is the source of the oil, have you determined whether or not underneath the region where the Elk Hills are situated that shale does actually exist?
 - A. I should say yes, from a geological standpoint.
- Q. And you base that opinion upon the fact that you find it over by the Temblor Range?
- A. I base it on the persistence of that diatomaceous shale over wide areas, and the geologic conditions so far as you can fix them under which that was deposited. It is inconceivable to me to believe that this shale stops abruptly at that 3000-foot thickness and does not pass under the Elk Hills.
- Q. Did you find it anywhere else except at the Temblor Range?
- A. It runs along the whole flank there down toward Sunset, and I understand goes beyond and passes around the east side of the valley.
- Q. Now, Mr. Veatch, did you find any of that shale except near the Temblor Range?
 - A. Yes.
 - Q. Where ? [630]
- A. There are fragments of it all over the Elk Hills.
 - Q. Pebbles?
 - A. Yes.
 - Q. Indicating erosions?
 - A. Yes.

- Q. Did you find any of it in place in the Elk Hills?
- A. No.
- Q. Or any indications?
- A. No.
- Q. Now, referring to plate 1 accompanying Mr. Arnold's Bulletin No. 406, you find areas within a short distance from McKittrick to the northwest of McKittrick where the surface formation is of a very much earlier period than these shales which you found, don't you?
- A. About eight miles northwest of McKittrick there is an exposure of the underlying bed.
- Q. What does that indicate to you as to the history of that country, in that particular spot?
- A. It gives me an idea of the sequence of beds and a sequence of formations there which will underlie the Elk Hills.
- Q. Why is it that at that point the earlier formation is on the surface?
- A. Because of the character of the uplift or erosion.
- Q. That is, uplift or erosion, or the two combined?
 - A. The two combined.
- Q. Have you any reason to say, assuming that wide area of this shale were laid down by sedimentation under the whole territory where the Elk Hills are, that there was no erosion there?
- A. I should say that there would not be an erosion of the magnitude shown northwest of McKittrick.

Q. Why not?

- A. Because that does not lie along the line of greatest [631] uplift. That lies over in the area in which there has been less uplifted and much less erosion.
- Q. How many uplifts have there been in that country?
 - A. I don't know.
- Q. Do you not know from your reading that there have been at least four?
 - A. It is possible.
- Q. Is it not possible that there was, before the laying down of the later sedimentation now forming the surface of the McKittrick Hills, a very extensive erosion of the shale beds lying under what is now the Elk Hills?
- A. There were possibly erosions. I should not say that it was profound erosion. It would probably be minor erosions. The lines of weakness, that is, the lines of uplifting which were done when this land first came above the surface, have persisted as the principal line of uplifting to this day, and, therefore, we would expect to believe that the greatest erosion would occur at the places which were most uplifted in the beginning of this cycle of uplifts.
 - Q. Can you tell with any degree of accuracy?
 - A. I think so.
- Q. Can you say from your examination of this country or from any information that you have obtained from any source, that the shale beds that you

have assumed originally passed under where the Elk Hills are, have not been eroded through their entire thickness?

- A. I think it is very improbable. I do not believe that they have.
 - Q. But, do you know?
- A. Only by the general character of that country. I should say that it is not a good hypothesis.
- Q. Taking the Temblor Ranch where the surface exposure, I [632] believe, was very much earlier formation,—what is called by Mr. Arnold the Knoxville-Chico formation—how do you explain the fact that that is at the surface, unless there has been at some time in the history of the country a very considerable erosion?
- A. There is, I explained, in that region northwest of McKittrick—that is the earliest lines of weakness, where there has been more erosion than at other places because of the character of the folding. The higher the folding, the greater the erosion.
- Q. Does the Temblor Ranch differ in any degree, so far as the line of folding is concerned, from the Elk Hills?
 - A. Yes; it is a higher uplift.
 - Q. That is, assuming that there is but one uplift?
- A. No; I am assuming that that is the earlier uplift the main line of weakness there lies in a northeast and southwest direction.
- Q. Now, suppose at the place where the Elk Hills are narrowest, owing to the natural process of

the folding, there was originally a very considerable fold, long before the time when the McKittrick formation was laid down as a sediment, and the ordinary processes of erosion went on for hundreds of thousands of years. Would it be at all unnatural that those uptilted shale beds would be eroded off down to the underlying Vaqueros and even lower?

- A. I do not think that your assumption is sound.
- Q. I don't care what you think. Answer my question.
 - A. I do not think that is probable.
 - Q. Answer my question.
 - A. Is it remotely possible, do you mean?
- Q. Isn't it—not remotely possible—isn't it probable that if there had been a folding and uplift of those shale beds [633] composing what Mr. Arnold has called the Monterey shale, and then a long period of erosion, that that uplift of the shale bed would be eroded possibly through its entire thickness?
- A. If we have a great uplift under the Elk Hills, that would be true. But I do not believe there was such an uplift.
 - Q. You were not there?
 - A. No.
- Q. And you don't know how many uplifts there have been in that territory, do you?
 - A. I am simply giving you my opinion.
 - Q. And your opinion is how many uplifts?
 - A. I said I didn't know.
 - Q. Does any man know?

- A. I think it can be determined.
- Q. But you have not determined it?
- A. No.
- Q. Then you are not in a position to say that there was not such an uplift?
- A. I don't say that I don't believe there was such an uplift.
- Q. Are you in a position to determine that scientifically?
- A. I think the information that I have would warrant the statement that there was not such an uplift—I mean an erosion.
- Q. What would you say as to the possibility of that Monterey shale formation, if we call it such, underneath the McKittrick Hills, having been folded and completely turned over?
 - A. Underneath the McKittrick Hills?
 - Q. Yes,-putting the Vaqueros on top.
- A. I would think that a geologist would have a very vivid imagination to suggest that.
- Q. You heard Dr. Branner testify that that was a possibility, did you not?
- A. Possibilities come in a matter of one in a thousand. [634] There is a possibility scientifically.
 - Q. And that is a scientific possibility?
- A. You can make such an assumption. I simply say I do not believe that that happened.
- Q. You heard Dr. Branner say that no man could safely say that it did not happen, in the absence of testing by drilling?

- A. I do not understand that he made such a statement.
- Q. If he did make that statement you would not agree with him?
 - A. The matter of absolute determination—
- Q. The question is, would you agree with that statement if he did make it?
 - A. Agree with what statement?
- Q. Read the former question. (The reporter reads the question on page 1564, line 22.)
- A. I would say that a geologist would say that it probably did not happen and would probably have ample reason for believing it.
- Q. You regard Dr. Branner as being a very eminent geologist?
 - A. Yes sir; I do indeed.
- Q. Probably one of the most eminent geologists in the United States, if not the world?
 - A. Right.
 - Q. Did you make any determination—
- A. If you will pardon me, I believe Dr. Branner stated that he believed there was a great thickness of diatomaceous shales beneath the Elk Hills.
- Q. If you will pardon me, I think he did not. Did you make any determination to find out whether or not, if there is any of this diatomaceous shale under the Elk Hills, the stratum is standing on edge or is lying flat?
 - A. No. [635]
 - Q. Then you don't know?

- A. No. I think it is probable that it is slightly eroded underneath there or slightly faulted, all of which, if it were true, would make the Elk Hills all the better territory.
 - Q. And if not true it would make it all the worse?
- A. No, because of the lateral movement of oil. Oil moves through the sand and frequently has moved over great distances in oil fields throughout the world.
- Q. Then you have not been able to reach a determination as to either the actual thickness or as to the position of the underlying shale beds in the Elk Hills?
 - A. I stated that I had an opinion in regard to it.
- Q. Have you reached a determination? Do you know how they lie there?
 - A. I believe they lie in certain positions.
- Q. I am not interested in your belief. I want to know if you have determined how they do lie.
 - A. No.
- Q. Do you know that there are any shale beds under there?
 - A. I think there are.
 - Q. Do you know?
 - A. I should say as a geologist, perhaps, yes.
 - Q. That you know there are shale beds there?
 - A. Yes.
 - Q. Where are they?
 - A. Beneath the Elk Hills.
 - Q. The entire Elk Hills?

- A. I think so.
- Q. How thick are they?
- A. I don't know.
- Q. What kind of shale are they?
- A. I think they are diatomaceous shale. [636]
- Q. Did you see any of that diatomaceous shale?
- A. No.
- Q. Is shale always diatomaceous?
- A. No.
- Q. Is shale diatomaceous over any considerable area when you find it diatomaceous at one point?
- A. I should think this exposure running over a great many miles shows it has a very great extent.
- Q. That is not my question. Is shale always diatomaceous over the entire bed when you find it diatomaceous at one point?
 - A. No.
- Q. And shale, even if diatomaceous, is not always oil-producing?
- A. No. You would assume that this is the source of the oil.
- Q. Then we have to assume that in order to get any conclusion?
 - A. No.
 - Q. Do you know it is the source of the oil?
- A. No; we do not have to assume it to arrive at any conclusion regarding the oil value of the Elk Hills.
- Q. Even though we do not assume that somewhere or some place there is some oil-producing

shale, or was at some time, we still know there is some oil in the Elk Hills. Is that your position?

A. I say you do not have to know the source of the oil in a given region to determine the area which is oil land. Your basis is the persistence of the porous bed or reservoir and the geologic structure.

Q. Has it been your experience and observation that whenever you have a reservoir, you always have something in it?

A. No; the presence of oil in a reservoir must be shown [637] either by seepages or wells.

Q. If you have a tank-car standing on a side track and see traces of oil on the outside of it, and you are satisfied that it was a very suitable receptacle for the accumulation of oil, would you say there was oil in it?

Mr. Mills—I ask counsel whether he considers that question very material in this case?

Mr. Lewers—I consider it exactly in a par with those conclusions.

A. It is entirely different. It is absolutely absurd. And has absolutely no relation to your geologic conditions. Your reservoir in the case of oil is not a tank-car, and anyone knows that that knows anything about the matter.

Q. I also assume that the tank-car did carry oil.

Mr. Mills—I would like to ask counsel how long he intends to continue this cross-examination along the lines he started? I shall certainly object to any further cross-examination which I think is immaterial and irrelevant, and encumbering this record with a vast amount of burdensome matter which has no relevancy whatever, and piling up the costs in this case.

Mr. Lewers—Well, you have registered your objection.

- Q. Now, coming to your secondary proposition: Did you determine that there was under the Elk Hills a suitable reservoir for the accumulation of oil?
 - A. Yes sir; I believe there is.
 - Q. Did you determine that there was?
 - A. Geologically, yes.
 - Q. Do you know that there is?
 - A. I believe there is.
- Q. You believe there is from a speculative point of view?
- A. No; it is a matter of very careful scientific reasoning which shows that it is the case. [638]
 - Q. What is a suitable reservoir for oil?
- A. You may have a porous sand; you may have a porous gravel; you may have a porous limestone or a porous sandstone or a porous conglomerate; porous . granite under certain conditions would be a reservoir.
 - Q. Is there a porous sand under the Elk Hills?
 - A. I believe so.
 - Q. Do you know it?
 - A. I think I do.
 - Q. Have you seen it?
 - A. No.
 - Q. Is there a porous sandstone under there?

- A. Quite probably.
- Q. Have you ever seen it?
- A. No.
- Q. Is there a porous granite?
- A. There might be at a great depth.
- Q. Have you ever seen it?
- A. No.
- Q. And your statement that there is a porous medium of some kind is merely a deduction from external appearances?
- A. Yes sir; and experience and knowledge regarding characteristics of beds and sedimentary strata.
 - Q. In California?
- A. No; but experience anywhere else is applicable here on matters of stratigraphy.
- Q. Then you would not agree with Mr. Youle that experience anywhere else is of no value in California?
- A. His experience was in drilling for oil in Pennsylvania, which was restricted. It was not to a question of the geological determination. The matter of stratigraphic geology is the same wherever it is applied, and experience in one region— [639] all experience on stratigraphic geology—would have a bearing on the determination of stratigraphic geology in other places.
- Q. Have you ever had any experience in lode mining?
 - A. No.

Q. Or had any experience in a lode mining country?

A. No; my whole experience has been with stratified deposits, in which it has been the problem to determine the persistence of coal t ad oil formations and water.

Q. Is it not a fact that pruden areful, experienced and successful business men,—men experienced and successful in lode mining and in placer mining for gold—expend large sums of money in following up the advice given by competent and experienced mining geologists as to the occurrence of either the precious minerals or copper or lead?

A. They frequently do, but I should say that the matter of lode mining is entirely different from coal and oil.

Q. I didn't ask you that. I am asking you one question and you have answered it. And is it not a very common thing for prudent miners who have money to invest to employ expert geologists and mining engineers to determine where they shall carry on their mining work?

A. Yes.

Q. And is it not also a very common thing in their determination, directed by experienced, competent mining engineers, that they find nothing at all?

A. I should not say it is a very common thing.

Q. You have had no experience in copper mining?

A. No; I have stated I had no experience in that. But when you say an experienced and competent geologist, you restrict your question very materially.

Q. Let us come to another thing. Is it not a very common thing when you have a mine, gold or silver or any other mine [640] for the metals, at a particular point, and another mine which has been proven, say a distance of half a mile or a mile away,—other mines in the vicinity, which are paying mines—with the surface indications, such as dikes, faults and so forth, favorable to the possible occurrence of fissure veins in other territory lying between these paying mines, to term that entire territory mineral ground?

Mr. Mills—I object to that question as obviously irrelevant. It concerns lode mining and has nothing to do with mining for petroleum.

A. I should say I don't know. I have had no experience in mining of that sort. But my best knowledge and belief is that it is an entirely different proposition from coal or oil or water.

Q. By Mr. Lewers—I didn't ask you that, Mr. Veatch. We will come to that. Is it not also true that very frequently land of that character lying between proven lode mines had a market value higher than its agricultural value by reason of its contiguity to the lode mines?

A. That is quite possible. But the fact would not be based upon the same line of evidence as the value of coal or oil.

Q. You are very anxious, are you not, Mr. Veatch, to bring in this comparison with coal and oil?

- A. Not at all; but it seems to me we are dealing with coal and oil and you are asking questions in regard to subjects which are not akin from a geological standpoint.
- Q. The important thing in connection with the development of oil in your mind is the oil reservoir, is it not?
 - A. Yes; and the geologic structure.
- Q. Which ultimately would have received the oil from the producing shale?
 - A. Right. From an economic standpoint. [641]
- Q. Now, does any difference occur to you between oil and coal in that respect?
 - A. Yes.
 - Q. What is the difference?
- A. The coal is where it was deposited. That is, relatively to the surrounding beds. The oil has migrated into the sand, but the sand is where it was deposited just as is the coal. It is a matter of determining the persistence and character of that sand in which it is absolutely akin to coal.
- Q. That is the clear line of distinction between coal deposits and oil deposits? That is, that coal deposits are where they are laid down and the oil deposits have moved?
 - A. Generally; yes sir.
- Q. Now, the same thing is true with water, is it not?
 - A. Yes.
- Q. Both water and oil are ambulatory, are they not?

- A. By that, do you mean it walks?
- Q. Yes, I mean walks.
- A. I should not say they walk. I should say they move.
- Q. When you get into an ambulance you don't walk.
 - A. These are not carried on anything.
 - Q. Oil is not ever carried on anything?
- A. On an ambulance to the reservoir, the way we are discussing it.
 - Q. Isn't oil carried on water?
- Mr. Mills—I would like to ask counsel what the proposition is—
 - Q. By Mr. Lewers-Isn't it carried by water?
 - A. Not always.
 - Q. Isn't it frequently so?
 - A. It is in some cases.
- Q. And the location of that oil in some cases depends on [642] the action of the water, does it not?
 - A. Yes.
- Q. And by reason of the presence of water in a formation that oil may be carried long distances from its source?
 - A. Yes sir.
- Q. And if the source of that oil is not connected with these porous formations which serve as reservoirs, or if the water cannot get at it, it will not move, will it?
 - A. It may.
 - Q. Upward?

- A. It may.
- Q. Where does it usually go if not influenced by water?
- A. It depends on the kind of material you are dealing with. If it is a natural porous bed—you see you are confusing the matter of the reservoir with the ultimate source.
 - Q. No, I am not.
 - A. The question relates to what?
- Q. Take the oil from the time it starts from its origin, uninfluenced by water, where does it go?
 - A. It would go into the adjoining porous layers.
 - Q. Up or down?
 - A. Both.
 - Q. To what extent will it go up?
 - A. It may go up great distances.
 - Q. Uninfluenced by water?
 - A. Right.
- Q. In the California oil fields have you ever found any indications of that?
 - A. No, I do not know that I have.
- Q. Do you know whether in the Temblor fields it has gone up or down?
 - A. No. [643]
- Q. Do you know whether in the McKittrick fields it has gone up or down?
- A. Probably gone up; regarding the diatomaceous shales as the source, it certainly has gone up.
 - Q. Has water caused it to go up?
- A. Not necessarily; it may have been in some cases an important factor.

- Q. Water is usually regarded as the most important factor, is it not?
 - A. I don't know that it is.
- Q. In the California oil fields is not water regarded as the most important factor?
 - A. I can't state that that is true.
 - Q. Do you know?
 - A. No.
- Q. You don't pretend to be thoroughly familiar with oil conditions in California, do you?
- A. No; I simply answer from the general standpoint.
- Q. Did you determine whether or not under the Elk Hills water has had any influence on the movement of oil?
 - A. No.
- Q. You read an affidavit, did you not, of a man named Love, preparatory to forming your opinion?
 - A. Yes.
- Q. And that referred to a well in Section 11, 31-24, did it not?
 - A. Yes.
- Q. And in that affidavit he stated, did he not, that a large flow of water was encountered at a depth of 260 feet?
 - A. Did he say a large flow or quantity?
 - Q. Quantity of water.
 - A. Yes. [644]
- Q. And at about the same depth they noticed a few drops of what he regarded as oil rambling down the drill?

- A. Yes; they obtained some oil there, he said.
- Q. And went to a depth of over 500 feet and then quit?
 - A. Yes.
 - Q. And found no further oil below?
 - A. They had a large amount of gas.
 - Q. But found no further oil below, did they?
 - A. I don't remember that they did.
- Q. Did that indicate to you in forming your conclusion that there was an oil deposit at a depth of 260 or '70 feet at that point?
 - A. No.
 - Q. What did it indicate to you?
- A. It indicated that there had been a leakage of oil—indicated by seepages and wells at the Temblor Range, and would be an important factor in proving beyond a doubt the presence of oil beneath the Elk Hills.
 - Q. In commercial quantities?
- A. I think it would indicate that it was in commercial quantities.
- Q. That is, a few drops of oil on the drill 260 or 270 feet down would be an indication?
- A. Yes; in connection with the geologic construction and the seepages and wells along the range, it shows that there is oil in the Elk Hills.
 - Q. And in commercial quantities?
- A. In connection with the surrounding conditions, yes; I believe it does indicate that.
 - Q. These few drops at a depth of 260 or '70 feet

indicate in connection with the surrounding conditions oil in commercial quantities in the Elk Hills?

[645]

Mr. Mills—Just a moment. I think the record will show that the witness has answered that twice.

Mr. Lewers-Not a specific answer yet.

Mr. Mills-Yes, he has.

Q. By Mr. Lewers-I would like another answer.

Mr. Mills—I object to the witness answering the question more than twice.

- A. Without that well, the geologic structure and conditions, the seepages and wells along the front of the range, are sufficient to show that that is oil land, and this simply corroborates that conclusion by showing the actual drops of oil.
- Q. By Mr. Lewers—Then even without those drops of oil rambling down that drill, you would reach exactly the same conclusion?
 - A. To me, yes.
- Q. Did the water have any significance to you in determining the value of the land?
- A. No; that surface water is not connected with the problem in any way.
 - Q. What can surface water be used for?
 - A. It depends on the character of the water.
- Q. Is it possible to use surface water for irrigation?
- A. If it is there in sufficient quantities. The presence of water there in a well does not show the quantity of water.

Q. Doesn't that indicate that that land has some possible value for water?

A. I think not. The geologic structure is opposed to your idea in that regard.

Q. Even though considerable quantity of water was found in that well you would say that that would not add in any way to the value of the lands for water?

A. A considerable quantity? We don't know that a con- [646] siderable quantity was found.

Q. Have you that affidavit before you?

A. No; you have the affidavit.

Q. You have a copy. I have merely a copy.

A. I have not a copy of the affidavit.

Q. I have not the original.

A. That is all that I saw—what you have.

Mr. Mills—I suggest that counsel leave the affidavits with the Examiner so we can examine them.

Mr. Lewers-I am not through with them.

Mr. Mills—That doesn't make any difference.

Mr. Lewers-It does to me.

Mr. Mills—What is your purpose with those affidavits? Do you regard them as your personal property?

Mr. Lewers—Till I complete the cross-examination, yes.

Mr. Mills—I would like to know if you refuse to permit us to examine those affidavits at any time?

Mr. Lewers—No. I don't think you furnished me with all the affidavits that were used. I am satisfied of that.

Q. The affidavit states that at about 250 feet "We struck a flow of water, and the greater the depth the stronger the pressure of water, and we were unable to shut it off." That would indicate to you from your experience in water wells that there was some water in there?

A. There was some water, certainly, but it would not indicate to me that there was necessarily a large supply. The geologic conditions and the climatic conditions are opposed to such an idea.

Q. What is the formation of the San Joaquin Valley in the vicinity of the Elk Hills? Synclinal or anticlinal?

A. It is a broad syncline, taking the whole of the south end of the San Joaquin Valley which includes the area from the [647] Kern River field on one side and this field on the other—is a broad syncline.

Q. And what is there to the east of it?

A. There is a range of mountains.

Q. Quite a high range, is there not?

A. Yes sir.

Q. Is there anything to prevent the accumulation of a large quantity of water in that syncline?

A. Yes; there is probably a large quantity of water in the syncline.

Q. Isn't it possible that the large quantity of water in that synclinal area may force whatever oil there may be in that formation clear through the Elk Hills?

A. Oh, no.

- Q. That is impossible, is it?
- A. I think so.
- Q. Why?
- A. Because your Elk Hills is a dome, and the effect of water around that dome would be to concentrate the oil to the top of the dome, and make the lands here the most valuable lands in the whole country.
- Q. Suppose that you had a slight dome with a synclinal area back of that, with a porous formation in which water was introduced from a source on the other side of the syncline, much higher than the Elk Hills, and no escape for that water to the surface; will that water go through the dome in the Elk Hills?
- A. I think not under the conditions existing here. In the first place, your statement of the source is incorrect—your hypothesis of the source. In the second place, the possibility of water going in to the oil sands is precluded by the fact that they are already filled with oil, and the whole intake is blocked with asphaltum and the water would not come in. [648]
 - Q. On the east side?
 - A. On the west side.
 - Q. On the east side?
- A. There is a big fault standing high up, and your intake would not be high enough.
 - Q. Where is that fault?
 - A. In the face of the granitic mass.
 - Q. Have you ever been there?
 - A. Yes.

- Q. On the east side of the valley?
- A. Yes.
- Q. How high is it?
- A. The recent beds there stop right at the edge of the granite, at relatively a low level. There is no condition of an artesian standpoint which would affect the Elk Hills.
 - Q. There are no artesian wells?
- A. No, I didn't state that. I said they would not affect the Elk Hills.
 - Q. Are there any artesian wells in that valley?
 - A. I think there are.
 - Q. A great number?
- A. I don't know. I should say it would be a good place for artesian wells.
- Q. In answering the question, when you say that the water is not in the dome, you are assuming that there is oil?
 - A. There is oil proven in the outcrop.
 - Q. In the Elk Hills?
 - A. I think so.
 - Q. The outcrop in the Elk Hills?
- A. No; in the flank of the mountain. Taken in connection with the source, it shows there is oil beneath the Elk Hills, which is corroborated by the seepage in the Elk Hills, in the [649] Buena Vista Hills, and the oil in the wells and the gas in the wells.
- Q. You mean because there is an outcrop in the Temblor Range that you know that there is oil under the Elk Hills in paying quantities?

- A. I believe there is.
- Q. That is not the question.
- A. I can express it this way:-
- Q. Will you kindly answer my question? Do you know that there is oil in paying quantities in the Elk Hills?
 - A. I believe there is.
 - Q. I wish a direst answer.
- A. I have stated repeatedly that I would not guarantee to any man going into the Elk Hills that he would get commercial wells. But I would advise him to drill and pay an enhanced value for that land because of the geologic conditions, the show of oil in that layer over a wide area.
- Q. And yet you don't know from the testimony which would have been available to a man in 1904 that you could make one dollar in a hundred years out of the oil under the Elk Hills, do you?
- A. I think a geologist would have taken just the same position that I have outlined, at that time.
 - Q. Can't you answer my question?
 - A. I have answered it.
- Q. Will you read the question again? (The reporter reads question beginning on line 4 of this page.)
- A. I would believe that a man would make a great success. I would not guarantee that he would. I would not guarantee a man in any business undertaking that he would make a profit.
- Q. Do you know now that there is sufficient oil in the Elk Hills to add to its richness? [650]

- 884
 - A. I believe there is.
 - Q. Do you know?
 - A. No, except as I have stated before.
- Q. Do you know whether there is enough oil in the Elk Hills to pay for its extraction?
 - A. I believe there is.
 - Q. Do you know?

Mr. Mills—I object to that question and any further examination along this line because the witness has repeatedly stated just what his opinion was, and his answer was entirely responsive to the question. It seems to me that counsel ought not to incumber this record with a lot of immaterialities and insist upon categorical answers where the witness has explained to the best of his ability everything that is responsive to the question propounded to him. I do not want to be repeatedly objecting, but it seems to me we ought to get down to the issues in the case without burdening this record with so much reiteration.

Mr. Lewers—I am trying to get the issues, and not mere guess-work.

- A. From scientific deduction, yes.
- Q. Do you know?
- A. What do you mean by "know?"
- Q. Are you not familiar with the meaning of the English language?
- A. The word "know" is a philosophical matter the question whether you know anything or not. I see a stick sticking in a pool of water. My eyes tell

me that the stick is crooked. I pull the stick out and it is straight. I cannot know from my eye-sight in that respect, but I believe from my previous experience that the stick is straight, and I believe there is oil under the Elk Hills.

- Q. You feel the stick when you pull it out? [651]
- A. No.
- Q. You look at it?
- A. Yes.
- Q. Did you see any oil?

A. I saw conditions around there, geologic conditions, which warrant the conclusion which I reached; and from experience of a great many men through a great many years, that conclusion is justified, and it is the kind of a conclusion on which men invest money and invest money generally with profit.

Q. And upon just that kind of conclusions men invest money in lode propositions?

A. No; I have explained the difference between lodes—

Q. Don't they invest money on just that sort of prediction?

A. Not on the same sort of evidence, no. The evidence in the case of lode claims is entirely different from the evidence in a case of economic minerals occurring in stratified deposits.

Q. In your opinion then—I am now asking for your belief—there is a large quantity of oil under the Elk Hills?

A. I believe so.

Q. And at what depth?

A. I should say it may be under five thousand feet or it may be over.

Q. In 1904 could that have been mined at a profit?

A. No.

Q. Would it have been mined in 1904?

A. No. But there are a great many valuable mineral deposits that cannot be mined at a given moment that are perfectly good mineral lands.

Q. And in your opinion does that oil zone extend anywhere beyond the Elk Hills to the north?

A. I think so.

Q. In your opinion is the Miller & Lux ranch valuable oil [652] land?

A. It has possible value. The value is not as great as the Elk Hills.

Q. Why?

A. The greater depth to the oil. It has a greater water content in the beds above the oil. The difficulty of casing off the water would be greater than in the Elk Hills. I believe the Elk Hills will ultimately be developed into good oil lands.

Q. When?

A. Ultimately.

Q. What period do you have in contemplation?

A. I think the conditions will arise that it will be developed very fully.

Q. When?

A. The matter of when involves a great many considerations.

Q. What considerations?

- The matter of the price of oil, questions of transportation, questions of economic features. I can illustrate that entirely in the matter of coal lands. You take a coal bed occurring a hundred miles from a railroad today in the central part of the west, a coal bed ten feet thick, of good bituminous coal. with coal beds occurring between that bed and the railroad and numerous mines on the railroad, which is true in a great many places in the west. That tenfoot coal bed cannot be mined at a profit today, possibly. The question of whether that is mined or not depends upon the building of other railroads. There is no settlement in the country. Very few people to consume the coal. A great many factors there. Now, on the matter of immediate development, that would not be coal land because it cannot be mined at a profit at this minute. There may be conditions of marketing and conditions of transportation.
- Q. Do those conditions of transportation and market exist [653] now with reference to the Elk Hills?
- A. There is a question there of depth. And, again, in coal, as I told you this morning, coal men buy land in which the coal is at a much greater depth than is mined today. There is the ultimate factor of development. It will ultimately be developed, and it is most valuable for that purpose.
- Q. You say "ultimately developed." Will you hazard a prediction as to when that would be?

- A. No.
- Q. Will it be within the next ten years?
- A. It is possible.
- Q. And it is possible that it may not be for twenty years?
 - A. It is possible.
 - Q. Or a hundred years?
 - A. I think that is very remote.
- Q. That is, you think it is safe to say that somewhere in the next hundred years the Elk Hills will be developed?
- A. Yes; I think they will be developed before a great many coal deposits in the middle west.
 - Q. And some of those may never be developed?
- A. Yes; and they are good coal land and are more valuable for the coal than anything else.
- Q. That is, you think they are all at some time in the future to be developed, and that is why they are valuable?
 - A. I think they will be developed.
- Q. Do you think it is at all hazardous on the part of a competent geologist to say that the Elk Hills is valuable oil land?
- A. No; I should say it was valuable oil land, and I would have said so in 1904.
- Q. Do you think it is at all hazardous to venture the statement that the Elk Hills contain oil at all?

[654]

A. I think they contain oil. I think the probabilities are such as to warrant the investment of money on it.

Q. Then you don't think the statement that it contains oil is at all a hazardous statement?

A. No.

Whereupon the further taking of testimony herein was adjourned until Tuesday, May 14th, 1912, at 10 o'clock A. M., at the same place.

On Tuesday, May 14th, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed.

Mr. Mills—It is stipulated between the parties to this cause that all the exhibits heretofore introduced by the government and those which may hereafter be introduced, if any, shall be placed in the custody of United States Attorney A. I. McCormick and preserved and cared for in the vault in his office; it being understood that counsel for the several defendants shall at all times have access to the same.

Mr. Lewers—That is agreeable to us.

Mr. Mills—It is stipulated that no question shall be raised by either party upon the regularity of the proceedings taken and had in this cause on this, the 14th day of May, 1912, because of said day having been declared a holiday for the purpose of state primaries.

Mr. Lewers—That is agreeable to us.

A. C. VEATCH recalled.

CROSS-EXAMINATION resumed

By Mr. Lewers:

Q. Mr. Veatch, you testified—and I am referring to page 1347 of the record—as follows: "The stratified rocks are [655] laid down in relatively regular

layers, for the most part beneath the sea, and are to be contrasted with other rocks formed by igneous intrusions or volcanic outpourings or which have been so altered by metamorphic action as to lose their former characteristics. The individual layers of stratified deposits can be traced for many miles, and in many cases hundreds of miles, showing to a great extent the same characteristics, and it is on this regularity or irregularity as shown by the outcrop that practical men base their conclusions and have spent great sums of money in developing minerals of the kinds which occur in stratified deposits." Now, did you trace any such stratified deposits for many miles in the vicinity of the Elk Hills, or is that merely a general preliminary statement?

- A. That is a general statement of fact. I think it applies to this region. There is such a regular or irregular layer running along that mountain for many miles—several of them.
- Q. Well, did you select any layer of that kind, or stratum, on that outcrop along the Temblor Range and follow it for any distance to determine its continuity?
- A. Those diatomaceous beds are very persistent, that is, considered as a group of beds. They run for a great many miles.
- Q. I am not asking as to any group of beds, but as to any particular bed which you would say belonged to one period of time.
 - A. Well, those diatomaceous beds.

- Q. Through a single period?
- A. I think so.
- Q. Well, did you determine in any way to what period they did belong?
- A. No. They could still belong to one period and not have that period determined.
- Q. Did you follow from any point to any other point at any distance from it any particular layer?

 [656]
 - A. What do you mean by-
- Q. I am using the term which you employed—showing that the stratum or series of strata that you were examining belonged to some comparatively short period of geologic time?
- A. Why, I have stated those diatomaceous beds as running a great many miles there.
- Q. You are aware, are you not, that Mr. Arnold has termed those shales at McKittrick "Monterey shales"?
 - A. Yes.
- Q. Now, did you follow what he has termed "Monterey shales" for any distance at all along the outcrop?
- A. I followed them along that mountain range there.
- Q. How far did you follow what he has called the "Monterey shale"?
- A. In the region between Sunset and below Sunset and McKittrick.
- Q. And did you find Monterey shales exposed along that entire region?

- A. Found diatomaceous shales.
- Q. Well, did you find Monterey shales?
- A. I don't know that they are Monterey.
- Q. Then the exposures at different points along that area might have belonged to other formations?
- A. I don't believe so—referring to the diatomaceous beds I am speaking of.
- Q. Do you think they are all a portion of what Mr. Arnold has termed "Monterey shales"?
- A. He has noted them as Monterey. It is a matter of correlation as to whether Monterey includes that, if that is the definition of the word "Monterey"; and for any economic purpose concerned here we have the three part division of that mountain chain that I outlined yesterday. [657]
- Q. That may be or may not be; but what I want to know is, did you determine that all of these exposures of shale which you have termed diatomaceous shale belonged to the same period as those which Mr. Arnold has called the "Monterey shale"?
 - A. Yes; the ones that I am speaking of do, I think.
- Q. And were they laid down, in your opinion, at the same time as the shale which Mr. Arnold has called "Monterey shale" which is revealed at McKittrick?
- A. Yes; in the stuff just southwest of McKittrick they are observable.
- Q. Well, was it at Sunset laid down at the same time, in your opinion?

- A. I think, relatively speaking, in a geologic sense.
 - Q. And in the Devil's Den district?
 - A. I don't know.
 - Q. You have examined that, haven't you?
 - A. No.
 - Q. Have you been up there at all?
 - A. No.
 - Q. Then you are not familiar with that?
 - A. No.
- Q. In what direction is the diatomaceous shale which Mr. Arnold has called "Monterey shale", which is shown at McKittrick, dipping? West or east?
 - A. It is badly broken there.
- Q. Well, where you find the exposure or section of that shale in the vicinity of McKittrick, in which direction is it dipping? East or west?
- A. I think that you can get the dip in almost any direction at McKittrick on those beds. That is my general impression of it.
- Q. Is it not a fact, Mr. Veatch, that in the vicinity of [658] McKittrick the thrust has thrown what Mr Arnold calls the Monterey shale from the west on top of the formation lying to the east?
 - A. I believe that is true.
- Q. So that the section which is exposed there is a section of the overthrust from the west, is it not?
 - A. Yes, in a portion of that McKittrick Hill.
 - Q. And that indicates to you, does it not, a definite

fault line—more or less definite fault line at McKittrick?

- A. It does.
- Q. With a thrust from the west?
- A. Yes; probably so.
- Q. And the exposures of oil in the shape of asphaltum are in the vicinity of that fault, are they not?
 - A. Yes.
- Q. Did you determine whether or not the oil which produced those asphaltum beds there came from the east or from the west?
 - A. I did not.
 - Q. You could not determine that, could you?
 - A. I don't believe I could, no.
- Q. And was that not a factor—that is, the overthrust from the west—rendering it somewhat difficult to determine the thickness of any beds of this shale that might extend toward the east from McKittrick?
- A. If that was the only exposure in that whole region, that would be true, but taking the general geology into consideration, I think that should be regarded as a minor disturbance.
- Q. Where else did you find any exposure of that same structure, into that same shale?
- A. I think that the beds there in the Temblor Range to [659] the southwest show it.
 - Q. To the southwest?
 - A. Yes.
 - Q. Did you find any in the vicinity of Midway?

- A. Yes. They belong to the beds below those porous beds that I have spoken of as the third member.
 - Q. Did you find any opposite the Elk Hills?
- A. They extend along that whole range. The nearest point they approach to the Elk Hills is in that McKittrick district.
- Q. You have a copy of Mr. Arnold's plate No. 1, have you not?
 - A. Yes.
- Q. The portion of the Temblor Range that lies opposite the Elk Hills, and particularly opposite the lands in question in this case, is some distance to the southeast of McKittrick, is it not?
- A. It is much nearer to it to the west of the hills. The matter of "opposite" I think is merely a quibble.
- Q. That may be, but perhaps I have a reason for indulging in that quibble. Will you answer the question?
- A. Well, now, it is simply a question of what you mean by "opposite". A building may face on two streets. It can have things opposite in different ways.
- Q. I will explain what I mean by opposite, Mr Veatch. I did explain it yesterday. Take a line running generally along the axis of the anticlines which you have indicated in the Elk Hills, and draw a line perpendicular to that and as near perpendicular to the axis of the Temblor Range anticlines as you can. Where will it strike the Temblor Range?

A. Some place near Midway.

Mr. Mills—That is the center of the line you mean? Mr Lewers—Yes.

A. And did you find, at any place between Midway and a [660] point say eight miles to the northwest of Midway, any exposures of sections of this diatomaceous shale?

A. No.

Q. Did you find any sections of that diatomaceous shale at a point between Midway and what is known as Spellacy Hill?

A. In the range back of it there is some.

Q. Well, in my question I am including any exposures that you found in that range, whether on the front of the range or back toward the west.

A. I think there is some in the hills to the west.

Q. Whereabouts? Could you locate that with more definiteness?

A. Only in a general way. I went in and out of those hills there without locating the sections.

Q. Well, with reference to the town of Midway, could you give me an idea where it is as to directions and distances?

A. It would be generally in that range of mountains to the west of Midway.

Q. And about how far?

A. Oh, it would be several miles.

Q. And how thick was the exposure of diatomaceous shale that you were able to determine there, approximately?

A. I made no determination there.

- Q. Where was it that you made your determination?
 - A. In southwest of McKittrick.
 - Q. About how far southwest of McKittrick?
 - A. Four or five miles.
- Q. And what is the appearance, Mr. Veatch, of diatomaceous shale which is oil-producing? What color is it?
 - A. I don't know.
 - Q. Did you ever see any?
- A. Only in regarding this diatomaceous shale as the source [661] of the oil. I say that I don't know that it is the source of the oil, but I believe it is. That has not been absolutely proven. It is not susceptible of absolute proof.
- Q. Would the horizon test which you have announced indicate to your mind that there was any oil in the land underlying what is known as the Midway Valley to the east of Midway?
 - A. Yes.
- Q. Did you determine what the dip of the formation was there?
 - A. No.
- Q. You know as a fact, do you not, Mr Veatch, that wells have been sunk on the slope leading down to that valley from the Temblor Range?
 - A. Yes.
- Q. You also know, do you not, that recently many of those wells in that district have been abandoned?
 - A. I didn't know that.

Q. There are certain wells in there sunk by the Standard Oil Company, are there not?

A. I have heard that the Standard was working in there. I don't know where they are working.

Q. The Standard Oil Company has withdrawn from that territory, has it not, on account of inability to find any oil?

A. I don't know that at all. I know they are working in that region, and according to newspaper accounts have gotten large wells recently.

Q. You have no definite information?

A. No; but what I have does not agree with that statement.

Q. Did you determine, or could you determine, Mr Veatch, at the place near McKittrick where this thrust from the west occurs, whether or not all of that shale formation had been thrust over the formation to the east? [662]

A. I didn't attempt to do so.

Q. And it is possible, is it not, that that shale formation is very much thicker than shown by the section on the surface?

A. You mean the remnant that is shown there at McKittrick?

Q. Oh, no; I mean from all indications on the surface.

A. Why, I think that that shale could be worked out in that range there, the thickness could be gotten with a great deal of definiteness, with a great deal of careful work.

- Q. Possibly what had been thrust up could, but could you determine the entire thickness of those beds of shale as originally laid down?
 - A. I think so.
- Q. From the evidence that there is there manifest?
- A. Yes, in that mountain range there in the neighborhood of McKittrick.
- Q. Isn't it possible that only a portion of the entire thickness of those shale beds has revealed itself by any evidence on the surface?
- A. There is a possibility of erosion, but from what I have seen of the region I should say that you could determine practically the total thickness, with careful work, extending along that range.
- Q. Now, did you determine or do you know whether the overlying portion of that shale is the oil-producing portion or not?
 - A. No.
 - Q. That is, I mean the oil-originating portion.
- A. I believe that it is. I believe that the whole series is an oil-producing formation.
 - Q. And upon what do you base that conclusion?
- A. I have stated that I could not demonstrate, and do not [663] believe that it is susceptible of demonstration, that the shale is the source of the oil. I believe that it is, and I believe that the whole diatomaceous shale is oil-producing.
- Q. In Bulletin No. 322 by Mr. Ralph Arnold and Mr. Robert Anderson, issued in 1907, discussing the

geology and oil resources of the Santa Maria Oil District of Santa Barbara county, Mr. Arnold and Mr. Anderson make this statement at page 74, in discussing the criterions for judging as to the presence or absence of oil: "The second criterion is the statigraphic position in the formation of the beds exposed over the area in which oil is sought. As has been before stated, the oil-bearing strata occur chiefly in the lower portion of the Monterey. Where the outcropping beds belong to the higher portion of the formation there is a greater likelihood that the underlying oil-bearing strata have been able to retain their contents than where the lower strata have been denuded of the greater part of the overlying beds or where they are themselves exposed or partially removed." Do you agree with that statement?

A. I don't know the Santa Maria field; but the answer to that I think is found, with relation to this field, in the facts that I stated here. The big oil-producers are overlying shales and the small oil-producers underlie this diatomaceous series, which would indicate that if the diatomaceous shale is the source of the oil, it is the upper portion that is the most productive.

Q. Then it is your opinion, from the indications, that in the vicinity of McKittrick the upper portions are probably the most productive?

A. That would be shown by the development, the conditions there.

Q. And that probably a different condition exists in the Santa Maria fields?

- A. I don't know as to the Santa Maria field. [664]
- At page 203 of Bulletin No. 406, on the Mc-Kittrick-Sunset Oil Region, issued in 1910, Mr. Ralph Arnold and Mr. Harry Johnson make the following general statement with reference to this territory that has been referred to: "The conclusions here to be discussed as to the course that future development will take in the McKittrick-Sunset region are based on a belief that the petroleum in the Devil's Den District is largely derived from the shales of the Tejon formation and the overlying Oligocene (?) rocks, and that on migration it collects in the sands in the Vaqueros (lower Miocene) formation, which lies above the two formations first mentioned; and that the petroleum in the territory from the Antelope Valley southward is derived from the shales of the Monterey and Santa Margarita (?) formations, and that on migration it collects in the sands at the base of or underlying the Monterey formation-that is, in the sands of the Vaqueros; in sand lenses in the Santa Margarita (?), and also in the porous beds at the base of the McKittrick, which unconformably overlies the older formations. All the conditions indicate that this belief is well founded." Do you agree with that statement?
- A. I have stated that I didn't know the Devil's Den district at all.
- Q. Do you agree with that statement so far as it concerns other territory out of the Devil's Den district?

- A. I have stated, which essentially answers that question, that in my belief, and to the best of my knowledge and belief, the diatomaceous bed of this region produced the oil, which accumulated in the sands which occurred below it and which accumulated in the sands which occurred above it.
- Q. Well, have you formed any belief as to whether or not the lower portion of that Monterey shale produced the oil originally? [665]
- A. I think it did, with respect to the oil that accumulated in the beds that underlie it.
- Q. Well, did the upper portions of that Monterey shale in the vicinity of McKittrick produce any oil?
- A. I think the whole series produced the oil. It is a matter that is very difficult of proof.
 - Q. Or to disprove?
- A. Yes. The argument as to the Elk Hills is based not upon the presence of this shale but on the presence of a porous bed which is filled with oil and the persistence of the oil in that porous series.
- Q. Mr. Veatch, in your opinion can the existence of oil be determined without drilling?
- A. It cannot be proven in commercial quantities without drilling.
 - Q. Can its occurrence be determined?
- A. I think it can to a reasonable degree. The matter of opinion is based upon experience and on the stratigraphic condition. The geology of the country shows, within the reasonable probability of suc-

cess of a business venture, that oil occurs there. If that were not true there would be no occasion whatever for employing geologists, as the Southern Pacific Company does and a great many other companies do.

Q. Is that made as an answer to my question or as an argument?

A. There is no argument in that. It is simply an explanation.

Q. You were asked with reference to the Southern Pacific employing geologists, were you?

A. I used that merely as an illustration. A large number of companies do. That was merely one large company which employs geologists in that way. There are a great many of them. [666] It is the usual method today.

Q. Now, in your opinion is the sinking for oil in a territory like that in the Elk Hills a gamble?

A. I would not term it so. I think there is an element of risk, as there is in all business ventures. I would not guarantee that there was oil there, but I would say that there was such a reasonable probability of it occurring there that it would justify expenditure. I would certainly advise a company to drill there and would be sure in my belief that they would get a large quantity of oil. If I didn't believe that from the geologic evidence I would not advise them to drill.

Q. Then would you agree with this statement, made by Mr. Youle at page 1051 of the record: "I would not care, if I had an idea the formation was

there and the ear-marks were there, whether the Associated Oil Company went down four thousand feet or whether they went down three feet and a half -that would not cut any figure whatsoever. They might get a water well. Water streaks go through any formation. That is why the oil business is a gamble. It is because there is no man, geologist expert or anything else, who can tell you where these faults are. There may be a world of oil there there may be a tight streak of sand, filled up with clay that won't let the oil through, and you might drill right in that spot. You can't look down and see; you may be in the wrong place. But by reason of being unfortunate and getting in the wrong place, that don't test a territory. It takes several wells to test a territory. That well of three or four thousand feet would not cut any figure with me at all. Q-Then it comes right back to this, that the proper test in the territory is the well? A-Wells-'wells'. Q-'Wells'. A-Plural. Q .- In the plural? A-Yes." Do you agree with that?

A. In a general way, yes. He distinctly states that if the ear-marks were there—by which I think he means the favor-[667] able geological conditions—he would contend that that was oil territory even though a man had put down a well and reported nothing. There are a great many cases where wells have been sunk where there is perfectly good oil, there is oil in large quantities, where the wells have reported nothing. There are certain mechanical features in drilling the well, and I think it is entirely true that

a single well would not test the oil layer. There may be a layer of water-bearing sand entirely separated from the oil; the oil sands may be passed through, and nothing but water developed. That well would not be conclusive in any way. That is particularly true where wells are drilled with a rotary and where the formation is masked by the mud used in the rotary process. No geologist will guarantee that oil will be encountered at any point; but he can give you the probabilities that exist there.

Q. Would you agree with this statement, made by Mr. Youle at page 1047 of the record: "I know this, that geologists, the scientific geologists—Le Conte—taught in school there was no oil in California, and gave a good reason for it. I know that you can get all the evidence you want from geologists and from bulletins that this is so and that is so, but you can't prove it until you put the drill on, and the drill has shown exactly what practical geology is."? Do you agree with that?

A. In a general way. I think Mr. Youle is an excellent example of a practical geologist. He has gone out there and by advance drilling has said, "This is good territory"; he has advised it and his prediction has come true. There is a great distinction between the practical field man and a man of the type of Professor Le Conte, who was a very able writer and who sat in his office and spun theories. There is a great difference, a very sharp line, between the actual field geologist and the writer of a great many text books. [668]

- Q. Well, the question was do you agree with Mr Youle's statement?
 - A. I think I have expressed my opinion of it.
 - Q. You agree with it with modifications?
- A. No; I say that Mr. Youle is in himself proof of the point. The development of this great West Side field, I think, is due to Mr Youle. He went in there before there was any development. There was a little development at McKittrick and that had been practically abandoned. He was sent in there by a group of oil men as a practical geologist. He went along the territory, he traced these seepages, he saw the dip down into the valley, he saw these folds in the side; he went back and said, "This is good oil territory", and on that advice they developed. I think you can get no better example of the soundness of practical geology.
- Q. And yet, during all that time nobody ever sunk a well in the Elk Hills? Is not that the fact?
 - A. That is not at all conclusive as to its oil.
 - Q. Well, that is the fact, isn't it?
- A. There may be a coal bed 200 miles from the railroad that no one can possibly develop. In advising regarding the development of that territory, here is the outcrop—a long outcrop—running for 30 miles or more. You will get shallower wells near the outcrop than you will at much greater depths, and it is simply a practical business proposition to sink for the shallow oil. I said yesterday that the Elk Hills will ultimately be developed, and, in my

opinion, will be a large oil field, a large producing field.

- Q. Why is it that at every opportunity you bring in your illustration of the coal fields? Is it by reason of your former experience as an expert in the case of the United States against Diamond Coal and Coke Company? [669]
- A. No. My experience has been, as testified, specially in stratified deposits. We are dealing with oil, which occurs in a stratified deposit; coal occurs in stratified deposits; and the two things are analogous in a great many ways and can be used as a very apt illustration.
- Q. But they are not analogous in this, that coal stays where it is formed and oil does not? Is not that the difference?
 - A. That is the difference.
- Q. Now, you say that by reason of that you believe this territory will eventually be developed and that in your opinion the proper test is not what its commercial value was in 1904? Is that correct?
- A. I think its absolute commercial value in 1904 is a minor matter. It is good oil territory.
- Q. Now, there is a great deal of clay, is there not, in the Elk Hills?
 - A. I have seen some.
 - Q. Clay contains aluminum, doesn't it?
 - A. I think so.
- Q. And contains, frequently, a high percentage of aluminum, does it not?

- A. Yes; a certain kind.
- Q. Aluminum has value in the market, hasn't it?
- A. Yes.
- Q. And the time may come, within the next fifty years, where they may discover some method to cheaply extract aluminum from the clay in those hills, may it not?
 - A. Yes.
- Q. Would you therefore say that the Elk Hills, in 1904, were valuable for their aluminum deposits?
 - A. No.
 - Q. Why? [670]
- A. For this reason, that clay is one of the commonest things on the earth. If a cheap method of obtaining aluminum from ordinary clay is devised, the clay deposits developed will be nearer to market than this deposit. But there is this consideration also, that if its ultimate value for aluminum is greater than its ultimate value for agriculture, I think that land is mineral land.
- Q. Well, you don't think it has any value for agriculture, do you?
 - A. Practically none.
- Q. Well, then, if it has ultimately the value of five cents an acre for aluminum, it is valuable aluminum land today, is it not?
- A. Not at five cents an acre. Your assumption I think, is not well taken.
- Q. All right. Where do you draw your line? That is what I am anxious to get.

- A. In what way?
- Q. As to the value. When would it become valuable for any mineral? What is your test of value above which you say it is valuable mineral land and below which you say it is not?
- A. I think there is a question of relative value. For instance, there is a farm on a particular clay soil. Now, if that clay soil is more valuable for growing wheat than for making brick, that is agricultural land; but if the clay is more valuable for making brick than for growing wheat, it becomes mineral land.
- Q. But suppose a method is discovered for extracting the aluminum from the clay, and the aluminum is worth more than a crop of wheat grown on that ground, somewhere in the next hundred years, wouldn't you say today that it is more valuable for the aluminum? [671]
- A. That is, if the aggregate value of the aluminum is greater than the aggregate agricultural value? Is that your question?
 - Q. Yes.
- A. I think it will. That applies naturally to gold mining and placer mining. You have a good orchard on a piece of land which has gold in the gravel below. If the gold is worth more than the orchard, that gold will be mined; if it is not, it will not.
- Q. What would you say then as to the classification you place the Elk Hills in, if this were the condition: That it was demonstrated that there was a

deposit of petroleum underlying the Elk Hills within reach of the drill at the present time according to recognized methods; that that oil could all be extracted at a cost of \$200,000 in sinking wells and operating them; that that oil when extracted would bring in the market \$250,000; that the soil, so far as the oil is concerned, would thereafter be valuable, and that in the course of fifty years there could be received from agricultural products—from grazing or from any other ordinary use of the surface of the soil (not mining) \$52,000 in profits. Would that be mineral land in your opinion or not?

A. I would have to know more about the receipts from your grazing.

Q. Take my assumption that there is a profit of \$50,000 from the oil and \$52,000 from other non-mining uses of the soil.

A. In how long?

Q. In a period of fifty years.

A. That is, a net profit, exclusive of taxes, exclusive of administration—

Q. Yes, a clear, clean-cut profit in both cases.

A. I should say that that was a doubtful question, because [672] there is the matter of moving your oil. Your assumption of \$200,000 may not be correct.

Q. Take my assumption as I give it. I want you to answer on the assumption that the facts are established. I want your determination of what you would call that, assuming that from the one you would make \$50,000 clear and from the other \$52,000 clear.

- A. I would say that it is mineral land, for the reason that one use would not interfere with the other. The instance I cited on the agricultural worth, was in a case where the agricultural value was destroyed by removing the mineral.
- Q. You say you would call it mineral land because the other use would not be destroyed. If they were occupied during any considerable portion of that period by oil wells, derricks, machinery, buildings, and so on, in connection with the oil development, and the persons operating the oil wells were entitled under the laws to the exclusive possession of the surface, as they are, wouldn't that interfere with any other use that you could make of the soil?
- A. Practically in the Elk Hills, no; because of the character of the Elk Hills. The value is so very low for grazing that the occupation of that by a few wells would not greatly detract from what little agricultural or grazing value it has.
- Q. You do not expect a great many wells to be there?
 - A. Not on \$200,000.
- Q. As a matter of fact, there are not many wells there, are there?
- A. There are a great many derricks there which are occupied, but I think the grazing is just as good as it was before the derricks were put there. Considered as a whole, the percentage of loss is so small as to be negligible.
- Q. Are the twenty-eight wells on Township 20-23 completely [673] valueless?

- A. I don't know. But even assuming that to be true, I do not think that bears on the oil value of the lands, for this reason: That there may be a derrick, and the well may not have gone to a sufficient depth, which I think is true with a majority of those wells. The derricks may have been put up on the assumption that the Secretary's order of withdrawal of September, 1909, was not valid. And the people may have concluded that the government would enforce that. That would be a serious consideration.
- Q. I wish you to answer my question without trying to modify the assumption. I am asking you as a hypothetical question, and assuming that the facts are true, that in a given period of time—say fifty years—the total amount of oil produced from any given piece of territory (Elk Hills or anywhere, it makes no difference) yielded a profit with economical management of \$50,000; and that during that same period from non-mining uses to which that might be put, it yielded a profit of \$52,000; and that if the land was occupied for the oil mining purposes on the one hand, the other proposition could not be carried out, and if it was occupied for the other purposes the oil mining could not be carried out. Now, which would it be? Mineral land or not?
- A. Mineral land, because if it is occupied by the explorer and is so used for fifty years for that purpose, it is certainly mineral land during the time it is occupied.
 - Q. Do you think that is a fair answer, Mr. Veatch?

A. On your question, yes.

Q. Did you listen carefully to the question? Did you not understand that there were two assumptions—on the one hand that it was occupied fifty years or could be occupied fifty years by oil mining and yield a profit of \$50,000, and on the [674] other hand that it could be occupied during that period for other purposes, not mining, and yield a profit of \$52,000? Now, having those two possible uses in view, which would that be in your opinion—mineral land or not?

A. I think that the question is not complete enough to warrant an answer.

Q. That is, you do not care to commit yourself on that?

A. No; I want to know certain factors. There is a question whether your surface is absolutely destroyed at the expiration of your mining, and whether it can then be utilized for a fifty year period for agriculture.

Q. You can assume one way or the other on that as you please. I am asking for its character now, where within the next fifty years either one of those two things can happen. I am not asking for its character after the fifty years. But we will assume that after the fifty years it could go on and still be used for other purposes—not mining. Now, can you answer?

A. I think if land is clearly more valuable for agriculture than mineral, it is agricultural land, and it has not become clear to me from your statement just the relationship.

Q. If agricultural or non-mining uses of that land would produce a profit of \$52,000 against \$50,000 on the other, you would say it was more valuable for agricultural than for mining uses?

A. Yes, on your statement of it. But I should add to that answer this: That I don't believe your question applies to the Elk Hills—

Q. Were you asked whether it applied to the Elk

- A. And, furthermore-
- Q. Were you asked whether it applied to the Elk Hills?
 - A. I see no reason for the question unless it does.
- Q. Do you feel it necessary to make an argument to remove any possible bearing my hypothetical question may have on this case? [675]
 - A. None at all.
- Q. Are you in the position of a cold, dispassionate expert, or in the position of a partisan for the government, in this case?

Mr. Mills—I object to that question because the witness has been fair and entirely responsive.

- A. I am not-
- Q. By Mr. Lewers-You are not what?

A. I think I am a dispassionate expert in this case, endeavoring to give to the court a fair idea of the facts existing in this case. I have been carefully over the field. I think I know the facts there, and I want them presented fairly to the court.

Q. You have been carefully over the fields? You

have been there three weeks in all, at odd times. Now, Mr. Veatch—

- A. I had not finished my last explanation. And, referring again to coal, here is land which will produce agricultural crops. Take the coal fields in Indiana and Illinois, and the surface is not destroyed in a great many cases and the land is certainly coal land.
- Q. Is it your idea that if the government sets aside the patents in this particular case, that after the oil is taken out of that land that there is any method whereby the patent can be restored?
 - A. You are asking me a question of law.
- Q. You have not hesitated to answer questions of law.
 - A. In what respect?
 - Q. With reference to the intention of Congress.
- A. That is a matter of scientific determination to me.
- Q. Now, did you in the preparation for your determination of what a man in 1904 would have known, read a bulletin issued by the California State Mining Bureau, entitled "Bulletin No. [676] 32," issued in March, 1904?
 - A. Yes.
- Q. On page 38 of that bulletin, referring to the Sunset region, the following statement is made: "The wells lie on the lower foot-hills of the coast range, and extend out on the mesa at their base, where are located the stations Pioneer and Maricopa, and

railroad station called Sunset. The elevation at Pioneer is 750 feet, and the wells rise to the maximum height of 1025 feet.

"The formation is of Middle Neocene age, and is in form an inclined plane, following the dip of the surface, in general. Depth of wells varies from 550 to 1000 feet, according to surface conformation, and to position on the dip; the average depth would fall below 750 feet. The producing strip is a very narrow one, and appears to have been determined on all sides, with the possible exception of the southeast corner." Did you take that statement into consideration in reaching your conclusion as to what a man in 1904 would have thought about the Elk Hills?

- A. I did; and I also took into consideration that the author of this paper has stated in the letter of transmittal that he is an engineering chemist, and stated what he saw and not what a geologist would deduce.
- Q. And then when he stated that the producing territory had been determined on all sides except on the southeast, and that it was a very narrow one, you do not think his statement was worthy of consideration because he was not a geologist?
 - A. I think his statement was not true.
- Q. Did it not occur to you that that statement might be a fair indication of the general impression and belief amongst oil men?
 - A. No, I don't think so.
 - Q. Did you also take into consideration when he

said on [677] page 40 with reference to the Midway: "The Midway wells form a narrow line, almost straight, from a point about one-half mile north of the northernmost Sunset well, extending northwest for some six miles. The producing strip does not appear to be anywhere more than one mile in width." Did you take that into consideration?

A. I did, and also the accompanying maps which show the producing wells which essentially agree with the Barlow & Hill map, which is one method I had of checking the accuracy of the Barlow & Hill map.

Q. And show that the producing strip was nowhere more than a mile in width?

A. It shows only that wells had been put only that far; it did not show that the country was not productive.

Q. And yet he states the producing strip was only a mile.

A. His conclusion is erroneous.

Q. That may have been the conclusion drawn in that country at that time?

A. It certainly was not from conversations that I had with various people. If that was the conclusion, you would have seen no more wells sunk and no more development of that great territory which has since been developed. If oil men had believed that, the development would have ceased, and it has not.

Q. I am speaking of what they believed in 1904. Did you take into consideration what he said with

reference to the McKittrick on page 41: "The town of McKittrick lies in a flat valley of the width of some two miles, and bounded by hill ranges of no great height, with a due northwest and southeast trend. On the hills to the southwest lie the principal developments, following the line of the valley for three miles. About midway between the town and the head of the valley a group of wells has been drilled in the mesa, while on the south [678] slope of the north hill range some oil has been obtained, though not in paying quantities. The town is at an elevation of 1114 feet, the highest wells 1400 feet.

"The formation is of middle Neocene Age, but its shape has not been determined with certainty. It is probable that the parallel hill ranges, which are remarkably regular and persistent, are of anticlinal formation; but such anticlines, if they exist, are certainly much faulted, and the productiveness seems to be largely determined by the presence or absence of these breaks. As will be readily seen, on examination of the map herewith, the field has been thoroughly tested, and proven to be very 'spotty', a condition readily explained by the highly broken condition of the surface, and the numerous seepages and evidences of chemical action." Did you take that into consideration?

A. Yes; and also the further statement that the depth of the wells varies from 500 feet to nearly 2000 feet, and in considering that, the wells which are referred to as on the north hill, as not paying wells, occur in a region which is much more broken than

the Elk Hills and is not to be compared with it in any way. That would be evident to a geologist who was there in 1904 examining the territory.

Q. But the statement contained in that bulletin does not indicate that it was known to the writer of that bulletin?

A. No; the writer of that bulletin stated in the introduction that he was an engineering chemist, interested in the quality of the oil and uses of the oil rather than in the matter of development.

Q. And you think for that reason he was not in a position, going into the territory in 1904 in place of 1912, like you did, to find out what was generally believed there at that time?

A. He was not in the position that Mr. Dumble and Mr. Owen were in at that time. [679]

Q. That is not the question. And why did you think it was necessary to bring them in? Is it as a disinterested expert or as a partisan?

A. Because in forming my opinion I was sent into that region to determine what a geologist would have concluded in 1904, and it has been testified that these geologists were in there. I know of their work. I know of the character of that work. And, therefore, form some conclusion as to what they must have seen when they were in there.

Q. The question I asked you was whether in your opinion you, in 1912, were in a better position to determine what was known and believed in that territory concerning the occurrence of oil than the writer

of this Bulletin who was in there in 1904 in place of 1912?

A. Yes; I think this bulletin takes no account of a paper by Frank M. Anderson, which is very detailed in character.

Q. You have that paper in your possession now?

A. No.

Q. You are referring, are you not, to a paper called "A Stratigraphic Study of the Mount Diablo Range in California"?

A. Yes, sir.

Q. Will you kindly examine that and find some statement by Mr. Anderson indicating in any way in a remote degree that the Elk Hills contain oil?

A. It relates to the structure of the region, the general geologic sequence. It shows a very careful geologic investigation which bears entirely on those problems. The bulletin expressly says that it avoids any reference to economic features, because the work was done for private purposes and not for publication. On page 156 of the bulletin is this—

Q. Can't you answer my question, Mr. Veatch? Will you point [680] out anywhere in this paper by Mr. Anderson any statement that indicates in the remotest degree that the Elk Hills are oil territory and were considered such when he wrote that paper in 1905?

A. He did not so state. I am explaining why he did not so state, and am explaining that it says—

Q. You cannot point out any such thing?

A. No statement that the Elk Hills are oil land.

Mr. Mills—I object because you did not permit the witness to fully answer your question.

Mr. Lewers—I don't want a rambling dissertation.

Mr. Mills—He has got down to the point of why he did not declare the Elk Hills oil territory.

Mr. Lewers—I think Mr. Anderson is better able to explain why he did not.

Mr. Mills—If you permit Mr. Veatch to finish his answer, he will explain it.

- Q. By Mr. Lewers—The question is whether you can find anything in there which furnishes a foundation for your saying that in 1904 that was regarded as oil territory. I don't care for explanations why it don't say so, but whether it does?
- A. On page 168 is this statement: "The greatest thickness of Miocene rocks found in any part of the range is near McKittrick and Temblor," and again on 169, "The most conspicuous member of the Miocene in this section is the Monterey Shales, which have here an aggregate thickness of more than 5000 feet." "The siliceous portion of the Monterey Shales predominates, and generally shows remains of Diatomaceae and other siliceous organisms, with bones and scales of fishes." "The Monterey Shales, apparently, in undiminished thickness, make up the mass of the main range west of McKittrick, but they have not been traced easterly much beyond the Sunset District." [681]
 - Q. "Make up the mass of the main range west of

McKittrick, but they have not been traced easterly much beyond the Sunset District." Does that say anything about the territory? Does it refer in any way to the territory where the Elk Hills are?

A. It is an important geologic observation which bears directly on the questions involved. It shows the detailed character of the work in that region, which was available at that time to determine the problems involved in the Elk Hills. With that knowledge of the range, an examination for a part of a day in the Elk Hills would have satisfied one of the character of that land.

Q. Does that statement that you have read from Mr. Anderson's paper lead you not to attach any importance to the statement in Bulletin No. 32 with reference to the McKittrick District which I read?

A. That and other things which I have explained. And, furthermore, in the preface of this bulletin, on page 156, is the statement:

"The systematic study of the field covered by this paper, and its stratigraphy, was begun for purely economic and private purposes and not for publication; nevertheless, so much data and material of a scientific interest have been gathered, and so much information has been acquired, part of which, though of a practical nature, it is permissible to make public, that some of the more general facts are here offered as a contribution to the geological literature of California.

"The matter and conclusions set forth are the result

of a field-study extending over a period of more than two years, made partly alone, and partly with the cooperation and aid of Mr. Josiah Owen, whose knowledge of the field is both extensive and practical to a high degree, and to whom are due many of the stratigraphic observations here presented. [682]

"The advantages for a stratigraphic and faunal study offered by this field are in most respects unsurpassed anywhere. The aridity of the climate, and the soft and crumbling nature of the younger sediments, together with the action of the wind, combine to give excellent and accessible exposures of rock, while in many cases the almost perfect preservation of the shells and other fossils renders the task of identification satisfactory. The structure of the rocks, moreover, is generally simple, and strata are readily followed to almost any extent, particularly along the eastern flanks of the range, to which most of the field work was naturally confined.

"In this connection it is proper to mention the generous interest taken in this work by Professor E. T. Dumble and the many facilities afforded through his kind co-operation."

On page 157. "The Mount Diablo Range, as defined by Whitney, extends along the southwestern border of the Great Valley of California, from Mount Diablo, near the Straits of Carquenez, southeasterly to Pine Mountain, where it unites with the Tehachapi Range, which links it with the Sierras. Thus the Valley of the San Joaquin is surrounded by a contin-

uous barrier of ranges on the east, south, and west, while it is separated by the Mount Diablo Range from the rest of the interior basin occupied by the Salinas and Carisa Valleys. In other words the Mount Diablo Range divides the basin of the California interior somewhat centrally, presenting at the same time magnificent stratigraphic sections that are unsurpassed anywhere in the west in their exposures."

Q. What do you read that for?

Mr. Mills-In response to your question.

A. In response to your question. I was explaining why I think that was of importance.

Q. By Mr. Lewers—Is the region that he refers to there [683] the Elk Hills?

A. No; it is the region west and northwest.

Q. And extends clear from San Francisco south, doesn't it?

A. Not specifically, I think. The paper is restricted in the region from Coalinga to the west of McKittrick.

Q. Isn't it a fact that you read that merely because of the reference to Mr. Owen and Mr. Dumble?

A. No; it is a matter of a statement of how evident the geologic structure was in this region. The character of the exposures is most excellent and, as he says, most probably unsurpassed in the west.

Q. Why was it that you emphasized the names of Owen and Dumble as you read it, as if they rolled pleasantly off of your tongue?

Mr. Mills-I object to such quibbling sort of ques-

tions. You yourself have dragged in the name of Dumble and Owen repeatedly.

- A. I was not aware that I emphasized them.
- Q. By Mr. Lewers—You did not read it for the purpose of bringing them in?
 - A. No.
- Q. Is there anything in that which serves to contradict the statement made in Bulletin No. 32, issued in 1904 by the California State Mining Bureau, from which I have read?
 - A. It merely shows this-
- Q. Is there anything that contradicts any statement in that bulletin?
 - A. Not directly.
 - Q. Then what bearing does it have?
- A. I would have to go back to your several questions to know how that came about.
- Q. You are familiar, are you not, with various writings [684] of Mr. Ralph Arnold on California Oil Fields?
 - A. Yes sir.
 - Q. You have examined them all, have you?
 - A. I think not.
- Q. Mr. Arnold is generally recognized as one of the ablest geologists who has written concerning the California oil fields?
 - A. Yes sir.
- Q. And is a man who now has a quite extensive practice as consulting engineer and geologist in connection with the oil fields?

A. Yes.

Q. Are you familiar with a bulletin issued by Mr. Arnold, or written by Mr. Arnold, in 1905, on the Salt Lake oil fields near Los Angeles?

A. No.

Q. In that bulletin he makes this statement: "Anyone at all familiar with the conditions of occurrence of petroleum in the California fields knows that any but the most tentative predictions as to the location of the oil are extremely hazardous. The following suggestions, based on the evidence in hand, although lacking definiteness for the reasons above stated, may be of some assistance to those engaged in developing this field."

Mr. Mills-What page is that?

Mr. Lewers—Page 360 of House Documents, Volume 76.

Mr. Mills—We object to the question as irrelevant and immaterial.

A. I don't know just what the context of that report is. I don't know what the conditions are. But I think your question is answered by the fact that Mr. Arnold now has such a large private practice that if he could not determine with some reasonable degree of accuracy, people would not invest money on [685] his statements.

Q. By Mr. Lewers—In Bulletin No. 406 by Mr. Ralph Arnold, at page 210, he makes this statement: "Assuming the thickness of the McKittrick formation to be about the same in the hills as it is in the

Midway and McKittrick districts—that is, between 1500 and 2000 feet—it seems probable that at the axis of the Elk Hill anticline the oil-bearing zone is from 900 to 1400 feet below the surface." Would you agree with that statement?

A. No; it is contradicted by his own report. It is shown to be erroneous. You will find, in the first place, upon page 13, the statement that this is a preliminary report, and not the way that a final report would be prepared.

Q. Then you think-

Mr. Mills-Let the witness answer.

A. On his map he shows a line of 5000-foot depth on the north side of the Elk Hills. The dip of the hills on the north side is just about the same as the slope of the surface. There has been relatively slight erosion-a few hundred feet altogether-so that taking that line on his map, his map shows the depth from the top of the hill is something like four thousand to forty-five hundred feet. Again, in his own paper, in speaking of the McKittrick formation-on page 82-as to a partial section of the McKittrick formation on the northeast flank of the Buena Vista Hills. There he finds a thickness of a little over 1500 feet. He says: "The lowest beds of this section are probably as far down in the series as any exposed in either the Elk or the Buena Vista Hills." And again he says: "The oldest beds exposed in this vicinity lie in Section 11 at and immediately west of the road." Now, on page 159 he gives a well which

is sunk near this Section 11 in which oil was encountered at 2600 feet. Now, there is 2600 plus 1500, [686] which is 4100, which checks with his 5000-foot line in a general way. His statement is contradicted by his own evidence, and is merely to be read as a statement in a preliminary report.

Q. And you are here maintaining that Mr. Ralph Arnold made a serious error in his prediction?

A. I say there is a serious error in the statement. His prediction on the map is in entire accord with the fact.

Q. You say that was possibly due to the fact that this was a preliminary examination?

A. A preliminary report, which was prepared in haste and in which he did not correlate his various factors.

Q. Even in preparing this preliminary report he used a great deal more time than you did in examintion of the country, didn't he?

A. I don't know that he did in respect to the Elk Hills. In fact, from the map, I should say that he spent very little time in the Elk Hills. The report has covered in a few months a very large area. Parts of that work are in great detail parts are only touched. That is to be expected from the character of the report. My wonder is that he accomplished as much as he did in the time. I think it is a wonderful piece of work considering the amount of time spent on it. But it is not perfect. Mr. Arnold's investigation was devoted to a very large territory.

My investigation was directed specifically to the matter of the Elk Hills.

Q. You spent pretty nearly four days in there, didn't you?

A. Something of that sort. I think I have testified exactly what time I spent there.

Q. Were you acquainted with G. H. Eldridge in his lifetime?

A. Yes sir.

Q. He was a geologist, wasn't he?

A. Yes. [687]

Q. And a very good one?

A. Yes.

Q. Have you likewise Bulletin No. 213 of the United States Geological Survey for 1902, in which at page 306 there is an article by Mr. G. H. Eldridge on the petroleum fields of California?

A. Yes.

Q. Did you examine that bulletin prior to forming your conclusions as to what was known in 1904 in the McKittrick district?

A. Yes. I examined everything that I could possibly find.

Q. In that bulletin at page 309 Mr. Eldridge states as follows: "The structure of the McKittrick district is that of a sharp anticline, an echelon with adjacent anticlines of the range. Along its axis is developed the fault mentioned, which locally is of the nature of an overthrust, the siliceous shales of the Monterey west of the plane being pushed up well

over the sands, conglomerates, and clays of the San Pablo. While this fracture and fold along which most of the producing wells of the district are located, are the most important of the region, other folds and faults exist in lines parallel with these, and at either end of the district one or another of them may become the chief fissure, yet apparently, so far as is at present known, without especial accumulation of petroleum." Did not that indicate to you that in 1902 it was generally believed by competent geologists that those parallel anticlines did not contain oil?

A. No; I think he refers to the anticlines in the hills to the southwest of McKittrick.

Q. Oh, that is your explanation? In 1902 a competent geologist could have determined as well as in 1904, couldn't he?

A. He could. [688]

Q. In Bulletin No. 309 by Mr G. H. Eldridge and Ralph Arnold, being a bulletin covering the Santa Clara Valley, Puente Hills and Los Angeles oil districts in Southern California, dated 1907, at page 196, Mr. Arnold makes this statement: "Anyone at all familiar with the conditions of occurrence of petroleum in the California fields knows that any but the most tentative predictions as to the location of the oil are extremely hazardous. The following conclusions, based on the evidence in hand, although lacking definiteness for obvious reasons, may be of some assistance to those carrying on development in the Los Angeles fields." Didn't that indicate to you that

two years later, after he made his first statement of that kind, that Mr Arnold was still of the opinion that any predictions as to the existence of oil in any district were extremely hazardous?

- A. That is a very broad statement.
- Q. Would you agree with it?
- A. Not in detail. I think Mr Arnold would not agree with it in detail.
- Q. Mr Arnold can speak for himself. Again, in a bulletin, being Bulletin No. 321 concerning the Summerland district in Santa Barbara county, Mr Arnold in 1907 makes this statement at page 56: "It must be continually borne in mind that absolute determination of the possibilities of occurrence or non-occurrence of oil in any one locality, by work on the surface, even when augmented by a study of the known underground conditions in developed territory, is not possible. The best that can be done is to calculate the degree of probability on the basis of a summation of indications and structural conditions." Didn't that indicate to you that in 1907 his original opinion had even become stronger?
- A. No; that is a perfectly fair statement. That is what [689] you do. You calculate the probability and you calculate the probability in coal just the same way as you calculate in the probability in the Elk Hills. It is very great. It has become such a probability that it is a business proposition to develop it.
- Q. You bring in coal again. There is no coal out there, is there?

- A. Coal and oil occur in stratified deposits and are analogous in much the same way.
- Q. There are other deposits that occur in the same way. For instance, placer gold?
 - A. They do not occur in the same way.
- Q. Are you at all familiar with the placer gold deposits in the Tuolumne district?
 - A. Only in a general way.
 - Q. Don't they occur in the same way?
 - A. No.
 - Q. You don't know anything about them really?
 - A. I said I only knew of them in a general way.
- Q. Would you agree with Mr. Arnold's statement made in 1907 that—the same page—"The absolute determination of the possibilities of occurrence or non-occurrence of oil in any one locality, by work on the surface, even when augmented by a study of the known underground conditions in developed territory, is not possible"? Do you agree with that?
 - A. What is the next statement?
 - Q. Do you agree with that?
- A. No, not unless you read the balance of it. It is a fair statement to have the rest of the statement.
- Q. Now, three years later, in Bulletin No. 398 on the Coalinga district, Mr Arnold says—and this is the bulletin in which he discusses the Kettlemen Hills field—at page 235: "It must [690] be borne in mind, however, that absolute determination, by work on the surface, of the occurrence or non-occurrence of oil in any one locality is not possible. The

best that can be done is to calculate the degree of probability on the basis of surface indications and structural conditions." Do you agree with that, statement?

A. Yes. He is using it in the scientific sense absolutely. I have stated repeatedly that no reputable geologist would guarantee the presence of oil in any place. He would simply say the conditions are such as to warrant development, and those conditions in the Elk Hills are ideal.

Q. Do you know what Mr Arnold's experience has been in connection with the Kettleman Hills referred to in this Bulletin 398?

A. No, only in a general way. I know they are drilling there.

Q. And have found no oil?

A. No, but they are still drilling. I think they will get oil. I think the Kettleman Hills is good territory.

Q. Again, in 1910, in Bulletin No. 406, concerning the McKittrick-Sunset region, Mr Arnold makes the statement on page 205: "It must be borne in mind, however, that absolute determination by work on the surface, of the occurrence or non-occurrence of oil in any one locality is not possible. The best that can be done is to calculate the degree of probability on the basis of surface indications and structural conditions." Did it at all seem significant to you that he should repeat that statement year after year?

A. Yes. I agree with that statement. I believe

Mr Arnold's professional word is based on that statement. I think that the statement there of absolute determination is correct. The matter cannot be absolutely determined, but you can determine the degree of probability and that degree of probability is infinitely [691] greater than it can occur in any lode mining.

Q. Do you know anything about lode mining?

A. I have stated that I have not been in the lodemining field.

Q. Why do you make such a comparison?

A. You have repeatedly re-questioned me on the subject after I had told you that I had not had personal experience. You continued the same line of questions which I answered to the best of my knowledge and belief, and I am answering now to the best of my knowledge and belief.

Q. Did I ask you to make any comparison at this time with lode deposits?

A. No.

Q. Then you volunteered that out of your lack of knowledge of lode conditions?

A. No, not at all. That is a very unfair statement. I have had quite a little training in lode deposits, but not in the field.

Q. The prediction made by Mr Arnold in Bulletin 406 of oil in the Elk Hills and other portions of the district have already been to a large measure disproven, have they not?

A. I think not.

- Q. Mr Robert Anderson has succeeded Mr Arnold in the work of the United States Geological Survey in the California oil fields?
 - A. I think you can say so, in a general way.
 - Q. And he is a competent geologist, is he not?
 - A. Yes.
- Q. In Bulletin No. 431, issued in 1911, concerning oil prospects of Cantua-Penoche region in California, and concerning the Coalinga oil district, Mr Anderson makes this statement, speaking of the first district—Cantua-Penoche: "For an [692] undeveloped region such as this, in which the character of the rocks makes it not impossible for oil to be present, but which for the most part has not been subjected to experimental test by the drill and in which the local tests made have been inconclusive, it is of course impossible to reach positive conclusions as to the occurrence of oil in commercial quantities at depths". Do you agree with that?
 - A. I don't know that region.
 - Q. As a general statement?

A. It may be true in a certain locality and not in another. You will notice that he mentions no seepages, as in the Elk Hills region, and the occurrence of wells. There are several hundred wells. He mentions none of them. And in that respect it differs entirely with this region.

REDIRECT EXAMINATION OF A. C. VEATCH

By Mr Mills:

Your attention was directed by Mr Lewers to a

statement of Mr Youle at page 1047 of the reporter's transcript, and I will read to you from the same page -beginning on the same page-a question and answer which was made later. "-That is, the opinions concerning the geology of that territory or any other territory have suffered a material change as a result of the work of the drill, haven't thev? A-Not on your life. I say that the depth that a man would say -the depth of a formation-in that early day, that might thicken up or thin up and he couldn't see, was all bosh; and the fellows don't do it nowadays. Geologists, in those days, like LeConte, made predictions that were not true; but geologists since then have found out their mistakes and don't do it. I say, a geologist will say of those hills toward the Elk Hills and that whole [693] country, 'There is a good oil territory', but as to the depth, I don't see how they can tell." I will ask you if in a general way you agree with that statement?

- A. Yes. I think the depth can be approximated, but it is such an approximation that it is not an exact statement.
- Q. Now, there is one method of determining the extent and persistence of imbedded stratifications containing oil, and you mentioned only one of the many ways for determination of such, where minerals occur in stratified deposits. You were asked by counsel if you were not the pioneer in the advancement of that simple process of determination, which Mr. Lewers was kind enough to characterize as the hori-

zon theory. Do you know whether that method has been applied in any other kind of lands in other stratifications, for example, in coal measures?

- A. Yes; extensively used by geologists in classification of coal lands.
- I have here Bulletin No. 424 issued by the United States Geological Survey, and entitled "The Valuation of Public Coal Lands," by George H. Ashley, in which the author at page 7 states: "The object of this paper is to present briefly some of the facts on which the Department's regulations for classifying and valuing coal lands are based. The information already at hand in the Survey has been supplemented by data obtained in the fall of 1909 by the writer in Colorado, Wyoming and Utah, concerning the values of coal lands in those states." In a foot-note the writer of the paper says: "The writer, who is a member of the Survey's land-classification board, has for many years given special attention to the economics of coal. One of his earliest reports on this subject, bearing the title 'The Finances of Coal' was published in 1899 (23rd Annual Report of the Indiana Department of Geology and Natural Resources, pages 1490-1517)." Mr. Veatch, do you recognize any analogy [694] between the determination upon geologic evidence of the extent and persistence of coal measures and that of the persistence and extent of areas carrying oil?
- A. Yes, in this respect: That you determine the persistence of the porous bed which contains the oil in an analogous way.

Q. Do you know whether that horizon theory, so expressed, has ever been used in the classification of coal lands?

A. It has.

And you read at page 25 in this report: "Thus, on an undeveloped tract of land there may be only two openings on the coal, several miles apart, each showing workable coal. If this be the extent of the available knowledge, it may be thought safe to assun; that only a few acres of workable coal exist around each of the two prospect openings. If, however, it may be inferred from the stratigraphy that the two openings are on the same bed, and if, by means of openings a few miles farther north, the coal can be traced with great regularity for fifty miles northward, and the same way in other directions, the geologist may be justified in assuming that the bed maintains a workable thickness under the whole tract, and the land may be valued accordingly, some allowance being made for uncertainty. Again, if it is known that the bed just considered is usually underlain or overlain by other regular workable beds, even if these other beds have not yet been discovered on the land in question, such knowledge would justify the conclusion that these other beds are probably present, a conclusion that would increase the estimated value of the land, though with a great allowance for uncertainty.

"If any or all of the beds are inclined to be pockety or irregular, the allowance for uncertainty must be correspondingly large. Where they are so irregular or pockety that a large percentage or most of the land in developed areas is barren, [695] the unprospected areas must be rated as non-coal land until the presence and the thickness of the coal has been actually demonstrated.

"Another condition that renders difficult the valuing of coal land is common in the West, where knowledge of the coal beds is derived entirely from exposures along an outcrop that extends in a more or less nearly straight line. How should the lands back from the outcrop be valued? In the East and parts of the West the mountains form-that is, it follows in and out of one ravine or valley after another, zigzagging back and forth in every direction. In such a region it is usually possible to get sections in different directions at right-angles to each other and to observe any tendency toward thinning in any direction. But in parts of the West where the topography is young and simple and the country is little dissected, it happens in many places that the outcrop extends, say, north and south, and there is little or nothing to show whether the coal holds its thickness back from the line of outcrop in an east or west direction. Under these circumstances experience has seemed to justify the assumption that the coal will run as far back from the crop at any one point as from that point to the nearest place along the crop where the coal becomes unworkable. Thus if a given coal has a continuously workable section for ten miles along the face of an escarpment, it is assumed that at the middle of such an outcrop the coal may extend back from the crop for five miles and for correspondingly less distance as the two ends of the workable outcrop are approached, so that the area assumed to be workable is roughly a semicircle with a radius of five miles." I will ask you now, Mr. Veatch, whether you agree with that statement as applied to the geology of oil in a general way?

- A. I do, modifying the factors in the geologic structure [696] which must be taken into special consideration, which has been done in this case.
- Q. Have you made any special examination of Section 31 in Township 30-23? That was land which was patented to the Southern Pacific Railroad Company prior to the patent in issue in this case.

A. I have.

Whereupon the further taking of testimony herein was adjourned until Wednesday, May 15th, 1912, at 9:30 o'clock A. M.

On Wednesday, May 15th, 1912, at 9:30 o'clock A. M., the further taking of testimony herein was resumed.

REDIRECT EXAMINATION

OF A. C. VEATCH resumed.

Q. By Mr. Mills—Now, Mr. Veatch, what was the result of that special examination (referring to last question asked prior to adjournment yesterday, which question is read by the reporter) that you made of Section 31? You may state in general why you made the examination and what the results of your observations were as to the character of that land.

I followed the ridge down from McKittrickthe group of folds which lies south of McKittrickuntil I was past the portion where the greater problem appears. And in the valley in section 36, which adjoins 31 on the west-36 of 30-22-I found a number of dips in the porous beds that overlay the diatomaceous shale, and a series of topographic formsstrike-ridges-which connected these dips across the country, and all those dips there are to the northeast. And on the other side of 31 and 32, on the southwest slope of the Elk Hills, I found very marked dips to the southwest, showing that this area [697] lies in the syncline between the Elk Hills anticline and the McKittrick anticline. In the southeast corner of Section 31 there is the end of a short plunging fold—a little minor fold in the bottom of the syncline—which is possibly slightly faulted. The dip observations in 36 enabled me to arrive at some approximate idea as to the thickness of that series in the Elk Hills.

Q. By Section 36, what do you mean?

A. In 30-22, that adjoins Section 31 of 30-23 on the west.

Q. On cross-examination, Mr. Veatch, you were asked whether you had ever seen a statement made by Josiah Owen that he was a geologist in the employ or on the payroll of the Southern Pacific Railroad Company. Will you state what paper you saw when you made that observation?

A. It was the transcript of testimony regarding a land contest before the land office.

Q. I have here a copy certified by the recorder of the General Land Office to be a true and literal exemplification of certain testimony of Josiah Owen, filed in a contest in the Visalia local land office, known as 0321, and I will ask you to read it for the purpose of identifying, if you may, the copy of the original that you saw.

A. I should say this was a photograph of the original record that I saw.

Mr. Mills—We offer this certified copy, exemplified under the seal of the General Land Office, in evidence as government's Exhibit Z.

I might ask you, in this connection, about what date was that contest?

A. I think it was in December, 1908.

Q. Do you remember the title of the case? [698]

A. No.

Q. Was it a case in which Mr. Owen was one of the contestants?

A. I believe so.

Mr. Lewers—I object to the introduction of the exhibit offered in evidence on the ground, first, that it is purely hearsay, without any identification indicating that it is in any way connected with this case and, consequently, that it is a fugitive extract from a larger record, omitting the context entirely, so that it is impossible to tell from it the entire circumstances under which the evidence was given and impossible to determine whether or not in addition to the extract offered there may not have been other testimony in-

dicating a possible connection with the issues in this action, in the matter of time. I object on the further ground that it appears from the testimony of the witness now on the stand, although it does not appear from the extract itself, offered in evidence that this was testimony given in 1908—four years after the time when the lands in question in this suit were patented to the Southern Pacific Railroad Company and, for that reason, it is not relative to any issue in this case because it does not follow because Mr. Owen may have been employed in 1908 incidentally as appears from the extract, that he was in 1903 or '04 or at any other time.

The certified copy of transcript of testimony of Josiah Owen last referred to and offered in evidence is marked "Plaintiff's Exhibit Z".

Mr. Mills—I will ask Mr. Lewers now whether he will stipulate into the record that Josiah Owen was a geologist either in the employ of the Southern Pacific Railroad Company or of the Southern Pacific Company, defendants in this suit, before the patent in issue was issued by the government to the Southern [699] Pacific Railroad Company.

Mr. Lewers—In the light of the character of testimony which has been introduced by the government, I must respectfully decline to stipulate in any way. I expect to show the actual facts when we come to our case.

Mr. Mills—I will also ask Mr. Lewers, counsel for all the defendants except the Equitable Trust Company, whether he is ready to stipulate that one E. T. Dumble was employed as a geologist by either the Southern Pacific Railroad Company or the Southern Pacific Company prior to the issue of the patent in controversy in this case.

Mr. Lewers-I make the same reply.

Q. By Mr. Mills—Mr. Veatch, Dr. Branner testified that the word "mineral" now had a broader meaning than formerly. Do you agree with that statement?

A. Yes. In this way. That those who have attempted to restrict the word "mineral" in the manner explained in my former testimony, have found that their position was untenable, and there has been a gradual tendency to return to the original and common usage of the word. And in this respect it is correct to say, as Dr. Branner has said, that among scientific men generally the word "mineral" has a broader meaning than it did several years ago. Referring to the original and common use of the word, it is to be noted that it comes from the same root as "mine" and "miner", words of great antiquity in our language. We have "mine" and "mineral". It refers to any substance taken from the ground. Thus, in Bakewell's Mineralogy, which was published some years before 1866, there is the statement that the term "mineral" is in common life generally applied to denote any substance dug out of the earth or obtained from mines. In connection with petroleum mining, it should be pointed out, that the earliest extraction of this mineral from the earth was [700] by means of pits or shafts. One of the earlier explorers in Bur-

mah, referring to a period about 1700, speaks of an Oleum Terrae obtained from such shafts which was so highly regarded by the rulers of the country that they reserved it for their own use and considered it more valuable than gold. Later Captain H. Cox visited this locality and, in 1799, used the word "petroleum" in describing this deposit. When the word petroleum was first used, I don't know, since I have not made a special investigation of the subject. recall the reference to Burmah because I recently had occasion to look up the matter in response to an inquiry in reference to that country. In this country as early as 1833 B. Silliman, Sr., described the petroleum springs, using the word "Petroleum", in Allegheny county, New York, and the literature has been filled with references to rock oil and petroleum since that time. In 1865 the word "petroleum" was used in connection with the deposits in California by B. Silliman, Jr.

Q. On page 23 of Bulletin 46, issued by the Geological Survey of the United States, by Ralph Arnold and Harry R. Johnson, frequently referred to by counsel for defendants, I find this statement, under the heading "Land Classification": "The following areas within the McKittrick-Sunset oil region have been clasisfied as mineral lands and such of these as yet belong to the government have been withdrawn, etc." And on page 27 I find under that classification included all of Township 30 South, Range 23 East, which includes the lands involved in the suit, which

is thus classed as mineral land because of its oil value.

Do you agree with that classification?

A. I do.

Q. It appears from that classification that, weighing fully all the uncertainties and all the structural conditions and all features connected with the accumulation of petroleum [701] in commercial quantities, Mr. Arnold was willing to go on record in that bulletin that all the lands in Township 30 South, Range 23 East, are mineral lands because of their oil value. Now, you have stated that you were chairman of the Oil Land Classification Board of the United States Geological Survey. Will you now state whether that board ever considered the statement made by Mr. Arnold in that bulletin in its attempt to classify those lands for their character?

Mr. Lewers—To which we object as calling for hearsay testimony as to the proceedings of any such board, and I desire to ask a preliminary question:

Q. By Mr. Lewers—Are those proceedings in any way a matter of record?

A. In part, yes.

Mr. Lewers—I object on the further ground that the record is the best evidence.

Mr. Mills—In respense to that objection I will state that the witness has already testified that he was a member of that board and that he was chairman of that Oil Land Classification Board and must necessarily be familiar at first hand with the proceedings that he will now testify to.

Q. By Mr. Mills-I will ask this further ques-

tion of the witness in this connection: Whether that determination was made during the time you were a member of that board and while you were present.

A. It was.

Mr. Lewers—We nevertheless insist on our objection. A member of a deliberative body is not entitled to testify concerning the proceedings of that body merely because he is a member, if those proceedings are a matter of record, unless it is first shown that the record is destroyed or lost or for some reason is unavailable. [702]

Q. By Mr Mills—Mr Veatch, you may state in general whether that board agreed with the classification as set out by Mr Arnold in Bulletin 406, referred to by me.

Mr Lewers—To which we interpose the same objection.

A. It did. That classification was made before the bulletin was published, and the classification agrees exactly with the classification of the board, which was an approval of Mr Arnold's conclusion.

Q. And that bulletin was issued in 1910? At the time the report was considered by the Oil Land Classification Board, will you kindly give us for the purpose of the record the names of those who composed that board in the United States Geological Survey, at the time this classification was made by Mr Arnold, what their experience was and what they are now doing?

A. The members of the board at that time to the

best of my recollection were Ralph Arnold, Joseph A. Taft and myself. I was the chairman.

Q. Since that time what has become of Ralph Arnold?

A. He has severed his connection with the Geological Survey and is practicing as a consulting geologist.

Q. Where? At what point?

A. The California oil fields and generally throughout the country and the world.

Q. Do you know from your acquaintance with him and from your own knowledge that the advice of Mr Arnold has been sought by practical men in the oil business who invested any sums of money on his advice?

A. Yes; to the best of my knowledge and belief.

Q. By Mr Lewers—Based on what Mr Arnold told you?

A. In part.

Mr Lewers—I move that the statement be stricken out as hearsay. Mr Arnold is available. [703]

Q. By Mr Mills—Do you know from the published reports of Mr Arnold and from your own information where his experience has been largely confined to in the oil matters?

A. At the time I was a member of the board, his experience has been almost exclusively—as far as I know exclusively—in California.

Q. You have mentioned the name of Mr Joseph A. Taft. Do you know whether he has had any special knowledge of oil lands anywhere? A. At the time that I was a member of the land board, he had knowledge of the mid-continental field, which is practically the Oklahoma, and possibly some of Kansas. His knowledge particularly related to Oklahoma.

Q. Has he been active at all to your knowledge in the classification of coal lands at the time this report of Mr Arnold was considered by that Classification Board?

A. Yes; the greater part of Mr Taft's work and one of his qualifications, and the reason he was appointed, was his very wide experience in coal land classification. He segregated the coal lands for the Indian nations in Indian Territory, and did extensive work in classifying and examining valuable coal lands on which there was no exposure of coal, in Colorado and Utah.

Q. And in connection with what companies, if you know?

A. That was for the government. The Utah Fuel & Iron Company had obtained through statements that these lands were non-mineral, patents to large areas in Utah, and they were recovered to the government through Mr Taft's testimony on the geological deduction that they were coal land.

Q. Do you know whether Mr Taft is now connected with the United States Geological Survey?

A. No; he resigned his position. My understanding is that he is in charge of the work of the Southern Pacific Company in [704] Colorado and adjoining regions under the supervision of Mr E. T. Dumble.

- Q. You have referred to this company. What company was that?
 - A. The Colorado Fuel & Iron Company.
- Q. At the time this report was being considered for the purpose of classifying the lands in 30-23, which includes the lands in this suit, were you at that time a member of the board?
 - A. Yes.
 - Q. In what capacity?
 - A. As chairman.
- Q. Will you state what the method of that board was with reference to determining the official classification of these lands?
- A. The data collected by any geologist in the field was presented to the board generally in the shape of his map, and he explained the geologic features of it to the board.
 - Q. You mean Mr Arnold?
- A. In the case of Mr Arnold, yes. It was done in that way. Each map was presented and he explained the features, and the matter was passed upon from his statement. Questions were asked as to any point which might be in doubt by any member of the board.
- Q. Can you state whether the conclusion of the board as to the classification of the land embraced in that list which includes Township 30 South, Range 23 East, and, of necessity, the lands in this suit, was reached after a careful investigation of the facts upon which the report was based?
 - A. Yes; that was the method of its classification.

The matter of Mr Arnold's statement in the matter.

Q. Now, Mr Veatch, so much has been said about this report, [705] that I will ask you now whether at the time the classification to which you have referred was made of this oil land classification board, there was any thought at that time of this present suit, or did you have it in mind?

 No; I heard nothing whatever of it until very recently.

Q. Have you ever heard of this suit at that time?

A. No.

Q. Was the conclusion reached entirely independent of any consideration of a proposed suit, so far as you know?

A. Entirely so. The classification took no account of titles or vested titles. It was merely a classification of mineral lands without regard to ownership.

Q. Mr Veatch, at page 551 of the record—that is, the reporter's transcript—in the testimony of Mr T. E. Klipstein, who was secretary of the Eight Oil Company, it appears that Mr Klipstein testified to the land holdings in Kern County, California, of that company, as follows: "All of the north half of Section 31, all of the south half of Section 32 in Township 31 South, Range 23 East, M. D. M.; all of the south half of Section 4, Township 32 South, Range 23 East; all of Sections 26, 30, 32, 34, in Township 30 South, Range 24 East; all of Sections 20, 22, 24, 26, 28, 30, 32 and 34, Township 30 South, Range 23 East; all of Section 4 and the north half of Section 8, Township 31 South, Range 24 East."

Mr Mills—Mr Lewers, I desire to have these holdings of the Eight Oil Company, in which it has been testified that the geologists known as the late Josiah Owen and E. T. Dumble, who have been referred to in the testimony as geologists of the defendant Southern Pacific Railroad Company or the Southern Pacific Company, were interested, added to government's Exhibit I, so that the court may know what holdings that oil company, in which these gentlemen were interested, had in connection with [706] the lands in this suit. Have you any objection?

Mr Lewers—I have. Obected to on the ground that Exhibit I was introduced for the urpose of showing the conditions that existed prior to the granting of the patent in this case. I do not concede that Exhibit I does show the conditions, because it already contains matters that happened since that time. And I object to any change of that exhibit by adding things that, according to the testimony, did not take place until 1908, or '09, or '10, and I object on the further ground to anything being added to that map on the ground that it appears from the testimony of the various witnesses who testified concerning the Eight Oil Company that this land wos located for fuller's earth and not for oil, and located subsequent to the granting of the patent in this case.

Mr Mills—You will observe, however, that it is called "The Eight Oil Company" with an underscore under the word "Oil".

Mr Lewers-I observed that very carefully.

Mr Mills—My only purpose in asking whether you made any objection to adding it to the exhibit was simply to simplify the matter for the court, so that taken in connection with the lands in suit, it might be introduced at once on one exhibit, showing the lands which these geologists must have believed to be good oil lands at the time they invested money in the Eight Oil Company."

But, in view of your obection, which may or may not be valid, and in order to avoid any trouble, I will introduce another map showing it.

Q. By Mr Mills—I show you this map and ask you whether you had anything to do with the coloring of certain sections delineated on the map and, also, what the map is.

A. The map is a duplicate of the photographic copy of the base used on Exhibit I. And this map I have colored in in red the lands involved in this suit. [707]

Q. This is a duplicate copy of the base-map used by the government as Exhibit I?

A. Yes.

Q. Now, will you in some way, by colored pencil, indicate on this map the holdings of the Eight Oil Company as I read them: All of the north half of Section 31 and all of the south half of Section 32, in Township 31 South, Range 23 East. You are using a blue pencil, are you?

A. Yes.

Q. All of the south half of Section 4, Township 32 South, Range 23 East; all of Sections 26, 30, 32 and

34 in Township 30 South, Range 24 East; all of Sections 20, 22, 24, 26, 28, 30, 32 and 34 in Township 30 South, Range 23 East; all of Section 4 and the north half of Section 8 in Township 31 South, Range 24 East. Now, (witness having complied with Mr. Mills' resquest) will you make a proper legend indicating what the colors on that map mean? Mark it "Lands of the Eight Oil Company."

A. (Writing) "Lands of the Eight Oil Company in which it was testified to that the late Josiah Owen and E. T. Dumble, alleged to be geologists of the Southern Pacific Railroad Company and Southern Pacific Company, became interested."

Q. With the exception, Mr. Veatch, of what you have now placed on the map, is this map in all respects as fully qualified to be admitted in evidence as government's Exhibit I?

A. I think it is.

Mr. Mills-We offer this map in evidence as government's Exhibit AA.

Mr. Lewers—Before this is introduced in evidence and preliminary to any objection to the map itself, I ask that the legend put on the map be stricken out on the ground that it is a conclusion as to the testimony and involves a matter that is for the court to determine. [708]

Mr. Mills—I will say that the legend as it now appears on the map showing the names of the colored sections were as dictated by me as an aid to the court in determining what lands Dumble and Owen became interested in.

Mr. Lewers—That merely verifies my objection, and I renew it. And I object to the introduction of the map on the ground that it asserts matters occurring long subsequent to the patents involved in this action, and for that reason is not relevant to any of the issues in this case.

Mr. Mills—You admit, do you not, that the oil character of a portion of these lands marked in blue pencil, in which Professor Dumble and the late Josiah Owen became interested, according to the evidence already introduced, is relevant to the issues in this case, do you not?

Mr. Lewers—Not at the time to which this exhibit refers.

Mr. Mills-You may take the witness

RECROSS-EXAMINATION OF A. C. VEATCH.

By Mr. Lewers:

- Q. Mr. Veatch, when did you first read the transcript or any portion of it referred to in government's Exhibit Z, purporting to be part of the testimony of one Josiah Owen?
 - A. Probably two months ago.
 - Q. Where?
 - A. Here.
 - Q. How did you come to read that?
- A. It was evidence by Josiah Owen on the land, and I thought it would be possibly interesting.
 - Q. On what land?

- A. On this land somewhere in the Midway country.
 - Q. Anywhere in the vicinity of the Elk Hills?
 - A. It is near Midway. [709]
 - Q. Not in the Elk Hills?
 - A. No.
- Q. And you read the record for the purpose of gaining information concerning the Elk Hills?
 - A. No; I wanted to see what he said there.
 - Q. Why did you want to know what he said?
- A. I wanted to gain some idea of the ability of Mr. Owen as a geologist, in order that I might fairly judge regarding what conclusions he might have made prior to 1904. I know of no publication by Mr. Owen, and that was one way of checking the kind of work that he was doing.
- Q. That is, you were anxious to know what Mr. Owen knew prior to 1904?
- A. No; I was anxious to clear in my mind the ability of the man.
- Q. Why was the ability of Mr. Owen of importance to you?
- A. I was asked to report whether a geologist going into the Elk Hills in 1904 would have considered it oil land. I understood Mr. Owen had been in there and, in order to pass upon that matter intelligently, I wanted to know something of his ability.
 - Q. Was he, according to the issues that you had in your mind to determine, the only geologist to be considered?

A. I thought he was an important one because it was stated to me that he was an employee of the Southern Pacific Railroad Company and, therefore, would be an important geologist.

Q. You were endeavoring to ascertain what a competent geologist in 1904 would have thought?

A. Yes.

Q. Were you endeavoring to ascertain what Mr. Owen thought?

A. Only as I regarded him as one of the geologists that was in that region.

Q. Were you not endeavoring to find testimony connecting [710] Mr. Owen in some way with this case?

A. Only in the way that I have stated.

Q. Well, you were, were you not, endeavoring by every means in your power to find testimony connecting Mr. Owen with this case?

A. It was stated to me that he was in the hills.

Q. Were you not endeavoring to find testimony connecting Mr. Owen with this case?

A. Only in the way I have stated.

Q. Where else did you endeavor to find testimony connecting him?

A. I looked over the geological literature to see if he published anything.

Q. You were anxious, were you not, to find some connection with Mr. Owen?

A. No; I have no personal interest in this case in any way.

- Q. Where was it that you examined this record?
- A. In Los Angeles, in Mr. Mills' office.
- Q. The entire record?
- A. I think so.
- Q. And then you examined more than this mere scrap which has been introduced in evidence?
 - A. Yes.
- Q. And did you in that record find any discussion of the Elk Hills?
 - A. No.

Mr. Lewers-Have you that record, Mr. Mills?

Mr. Mills—I don't know whether I have it or whether I returned it to the General Land Office.

Mr. Lewers-If you have it I would like to have it.

- Q. Do you find anywhere in Exhibit Z any statement showing the knowledge that Mr. Owen had of the Elk Hills? [711]
- A. No; that was brought out merely on your question to me the other day.
 - Q. Was it brought out by any question of mine?
 - A. That is my impression.
- Q. Wasn't that purely a voluntary statement on your part interposed for the purpose of bringing Mr. Owen into the case?
 - A. I think not. The record will speak for itself.
- Q. Isn't this in your opinion and to your understanding simply a scrap or extract from that testimony for the purpose of showing that Mr. Owen was connected with the Southern Pacific Railroad Company?

- A. The purpose for which that is introduced the attorney can speak of.
- Q. Did you not consult with the attorney and talk over the introduction of this particular scrap of evidence?
 - A. I don't believe so.
- Q. Did you not call his attention to this particular scrap of evidence?
 - A. I did in the testimony that I read over.
- Q. And you called his attention to other matters which would tend to show the connection of Mr. Owen with the Southern Pacific Railroad Company?

Mr. Mills—I object to that question and any further questions of this witness of that character, for the reason that the witness has stated that he has no personal interest whatever, and that he is brought here as a government witness in a case in which he can have no possible feeling one way or the other except as an upright citizen to see that right is done. This is no controversy between individuals.

Mr. Lewers—I propose to show before I get through with it that it is.

Mr. Mills—You will have some difficulty in showing that. [712]

A. I do not recall specifically. I may say in a general way that I have endeavored in every way within my power to get the facts in the matter in order that there might be no injustice done in any way. In other cases and in other lines my opinion was asked and the statement was made that if I did not feel that they were mineral lands, the matter

would be dropped. In going over this matter from all sides that I possibly could, I felt that these were mineral lands and that the railroad company must have known it. That is merely my opinion, and, as such, I thought they were not entitled to it.

Q. And after you reached that conclusion you endeavored, so far as was within your power, to assist in gathering evidence to show those facts?

A. Simply gathering the truth and endeavoring to determine what the truth was in the matter.

Q. What you regarded to be the truth?

A. No; what the truth is.

Q. That is, you do not believe that in any of your investigations you could possibly be misled or in error as to what the truth is?

A. Oh, human beings are not infallible. But, to the best of my ability, I have carefully tried not to be misled in any particular.

Q. Does the fact that this extract, Exhibit Z, shows apparently that Mr. Josiah Owen in 1908 was on the payroll of the Southern Pacific Railroad Company, have any scientific value to you?

A. No; I have explained that the reason I read that testimony was to form an opinion of Mr. Owen's

ability as a geologist.

Mr. Mills—Why don't you ask the witness the question what his ability was?

Q. By Mr. Lewers—I call your attention to the first por-[713] tion of the page contained in Exhibit Z and to a checkmark at the top, and ask you if you made that checkmark?

- A. No; I did not.
- Q. Was it there when you first examined the exhibit?
 - A. I don't remember.

Mr. Mills—If you ask me who made the checkmark, I will tell you.

Mr. Lewers—If you want to go on the stand, I will ask you a number of questions.

Mr. Mills—You have been testifying into the record without going onto the stand. I merely offer a suggestion.

Mr. Lewers—I suggest, in the meantime, if you have any objections to make, make them; if not, don't say anything. That is merely a suggestion.

Q. How long were you a member of the classification board to which you have referred?

A. Two years. I was the first chairman of the board and was connected with the board till I went to South America.

- Q. When did you go to South America?
- A. In the fall of 1910.
- Q. When was it that the board passed on the recommendations of Mr. Arnold contained in Bulletin 406 as to the withdrawal of certain lands?
- A. To the best of my recollection, it was the spring or summer of 1899.
- Q. And Mr. Arnold, you say, was a member of that Board?
 - A. Yes.
 - Q. And he explained his reasons and grounds?
 - A. Yes.

Q. And you acted upon them?

A. Yes.

Q. You did not veto any of his suggestions in any respect? [714].

A. That I don't remember. The matter was gone over till we reached a common conclusion.

Q. Were not your instructions as members of that classification board to withdraw all lands that might by any possibility in the next hundred years be developed?

A. Are you speaking of classifications or withdrawals?

Q. Withdrawals. My question is very distinct.

A. As to withdrawals. These are classified lands and there are large areas withdrawn pending field work, and which may contain large areas which are not oil lands. There is a great distinction between a simple withdrawal which does not assert that it is mineral land, and a classification which does.

Q. Let us take your classification then. The more limited area, as you put it. That was your test from the economic side as to what lands should be classified as oil lands?

A. In oil lands it was rather the conservative basis of the depth to which drilling had already reached. I think that probably should be extended to a much greater depth, so that it may be co-ordinated with coal in which we classify coal lands at much greater depth than they are now mining.

Q. That does not answer my question. What lands did you classify as oil lands?

A. In general, lands up to the 5000 feet of depth.

Q. Did you classify as oil lands lands that you thought or that were reported to you might contain oil, or lands upon which oil had actually been discovered or was known to exist?

A. Lands on which the geologic evidence indicated that oil occurred.

Q. That oil occurred or might occur?

A. That oil occurred. It is a matter of geologic deduction. If the classification were limited to only the area proven by actual wells, it would be a very small area, and even then [715] your question, to refine it to the utmost, would be whether a well that actually yields oil would actually prove the ground for more than the ten inches at the bottom of the well.

Q. Then, in fact, you did in classifying as oil lands include lands that you thought from merely surface indications might contain oil?

A. Which we believed contain oil.

Q. From surface indications?

A. From geologic evidence.

Q. And that in many if not most of the instances was merely surface indications—what you call geologic evidence?

A. Yes; extending over a wide area. Geologic conditions on the surface of a limited area might not allow you to arrive at an exact conclusion. But when you take the evidence of a wide area, the conclusion is very sound.

Q. And in your classification of oil lands made in 1909 in the vicinity of McKittrick and in that coun-

try generally, you included portions, if not all, of about 70 townships, didn't you?

- A. I don't remember.
- Q. Have you Bulletin 406 there?
- A. Yes.
- Q. Will you look at page 24?
- A. Yes.
- Q. Is it not a fact that beginning at page 24 of Bulletin 406 and extending to near the middle of page 31, there is a list of lands withdrawn covering practically 70 townships?
- A. There is a portion of those that are withdrawn and not classified, and I have explained the difference between classification and withdrawal before.
- Q. Is it not a fact that beginning at page 24 and extending to the middle of page 29, in fine print, there are 55 townships [716] classified as oil lands?
- A. I have not counted them. There may be portions of that number. But if you will check it I think you will find not more than six or ten—1, 2, 3, 4, 5, 6—in which the total township is classified.
- Q. How many in which the greater portion is classified?
 - A. That I would have to check over.
 - Q. Why was it that in certain townships you only classified a portion of the township?
- A. Because the remainder was not oil land or on which the evidence was not sufficient to classify. They may have been either withdrawn or left as they were.

Q. And they may have already been patented, may they not?

A. In this classification no account was taken of the title to the land at all. They were classified irrespective of the title.

Q. And was any account taken of whether any productive developments had been going on on any of that land?

A. Yes; that follows in the geologic determination of the region. The geologic determination takes into account all the economic facts.

Q. And you have since ascertained that over a great portion of this land included in your classification of 1909, absolutely no oil has been discovered in paying quantities?

A. I should say that the great part of it is not yet developed. It is not shown that it is not oil land, by any means.

Q. You mean it has not gone deep enough?

A. There are several factors involved: The factors are depth, the factsors of faulty well drilling, I have explained; and I have explained the small production which means to me ultimate development when the present large supply is reduced, and the price of oil will increase and will justify the development of [717] a portion of those other areas which are not now developed. I might add that I regard the Elk Hills, and did at the time,—that in the best of the territory there is a portion of that territory lying down the dip below this porous upper member of my three-part series, in which your oil would be

in the lower sands at considerable depths. That land I regard as very much less valuable than the lands in the Elk Hills.

- Q. In your determination of this classification of oil lands, did you here again contemplate possible remote future developments?
 - A. We thought it would occur within fifty years.
- Q. Or might possibly be not until a hundred years?
- A. That, of course, is remotely possible; but we believed it would be within fifty years.
 - Q. Then your classification was in no sense limited to lands that could have been developed in 1909 with the means then at hand?
 - A. No; we considered the matter of immediate value very carefully in a number of board meetings and the advisory committee of the board, and it was found on carefully reviewing the situation that there might exist temporary conditions which would make property unworkable which would be considered a good mine; and that taking the question as a whole, as in the case of coal where 95 per cent or more of the coal lands, and great thick seams of good coal—
 - Q. I am asking you about oil. I don't care for a constant reference to coal.

Mr. Mills-You may finish the answer.

A. About 95 per cent or more of the coal land in the west would be classified as non-coal land, even though a great amount of it in acreage was being acquired by coal companies for the purpose of holding it for that very production. [718]

- Q. By Mr Lewers—You testified, did you not, that in your opinion whatever oil there might be in the Elk Hills might possibly be four or five or even six thousand feet deep?
 - A. Yes; that is possible.
 - Q. And might be even deepe
 - A. Yes; there are, I think, so eeper layers.
- Q. And in passing upon its value as oil land, on account, possibly, of such great depth, you took into consideration the chances that in the next twenty or fifty or more years means might be found for getting the oil at those depths?
- A. I think as a matter of fact means exist now. This depth limit to 5000 feet was fixed before there were wells in California of that depth then. And, considering the world at large, there are quite a series of wells in Galicia in rather soft strata—I think there are fourteen or fifteen or probably more—which have an average depth of 5000 feet, and a number of them are over. And of those wells four of them are producing only thirty-five barrels a day, and the maximum is producing about two hundred and fifty or possibly three hundred. And yet those people are now sinking other wells in the same region for that yield of oil. Now, in the next twenty years I think it is reasonable to think this land will be developed. I would put it much less than fifty years.
- Q. You answered the other day that it might not come within fifty years, but it might come in a hundred years.
 - A. I should say that that is the outside limit. I

[719]

think the chances of it coming in twenty years are much greater than its coming at a time longer than fifty years.

Q. In Bulletin No. 264 of the United States Geological Survey, being a record of deep well boring for 1904 by M. L. Fuller, E. F. Lines, and A. C. Veatch, published in 1905, at page 14 we find this statement in an article written by Myron L. Fuller:

"The depth to the productive rock is of great importance as affecting the success of a well. For a shallow well a relatively outfit can be used, but for deeper borings heavy and more costly machinery and rigs are required. These, with increased cost of fuel, outfits, casing, and greater difficulty of manipulation, make the cost of a well increase rapidly with depth. The amount of oil or gas which would give a good profit on the investment required for a 1000-foot well might not be sufficient to warrant the sinking of a 3000-foot well." Do you agree with that statement?

A. Yes.

Q. On page 16 of the same bulletin, occurs this: "Nothing can be further from the truth than the common fallacy that oil, gas, water, or whatever the driller may be in search of, can be had if the hole is only drilled deep enough. In unaltered porous rocks oil and gas may occur, within certain limits, regardless of depth; but all rocks, of whatever character, buried deep enough, especially if subjected to the powerful compression incident to the formation of

mountains, become altered through the influence of heat and pressure, often into more or less crystalline masses. In such rocks the volatile substances, such as the hydrocarbons, are expelled and it is useless to look in them for deposits of oil or gas." Do you agree with that statement?

Mr Mills—I object to that question unless the whole pamphlet is submitted to the witness.

A. I agree with that statement. The region that he refers to is entirely different from the region here. The matter that it is a common belief that if you go deep enough you will get the substances, is not the statement of the view of a scientist that you will get them. For instance in Long Island you have a series of underground waters which dip gently [720] towards the sea. You drill a well at one place 900 feet and you get a flowing artesian well. If you drill a well a few miles distant, because of the dip of the rock you start in granite below the base of this porous layer, and you may drill to China without ever reaching that layer. The depth at that point does not affect the other. In this case of the Elk Hills, I have carefully considered all matters there. Those are evident to any geologist working in the field. The depths of rocks in which there is no pore-space, or in which the pore-space has been entirely closed up by the superincumbent pressure, is a matter of ten miles or more and is much greater than any depth I considered in this region. The areas in which there is no pore-space in the rock due to metamorphic action and where the rocks are now at the surface due to

uplifting and erosion, are entirely different from the character of rocks that occur in this region. These are sedimentary strata practically unaltered, and in which none of these things that Mr Lewers has mentioned apply.

Q. You think, then, that Mr. Fuller when he said that in the bulletin that I referred to, was speaking

of wells ten miles or more deep?

A. No; he said there were two classes. There were the rocks at the surface which have been subject to metamorphic action, and I illustrate that by the condition at New York where the granite and other metamorphic rocks are at the surface. And you start drilling there and you will not get the cretaceous sands which yield the water at Long Island. You start below the bottom of the bed. And, similarly, if you go east of Bakersfield and start drilling in the granite rock there, you would have an entirely different proposition from drilling in the sedimentary beds which underlie the southern end of the San Joaquin Valley. [721]

Q. Those would be igneous rocks, would they not?

A. Yes, in a general way.

Q. On page 16, immediately following the portion which I read, referring still to the same bulletin, Mr. Fuller states: "It is also useless to seek for oil in rocks of igneous origin—that is, those which have once been molten—for the conditions of their formation are such as to preclude the formation or retention of oil or similar substances." Does not that indicate to you that Mr. Fuller differentiated between the two

classes and that his first statement concerned sedimentary rock?

A. No; his second statement is not true, to start with. It is too broad a statement. You see, there are two things. If the hydrocarbons were there before the intrusion, the heat might drive them away; but if after the intrusion has come into the rock—supposing it is slightly porous and it cools down entirely—the oil will go into that porous rock, or the water either. The oil and water do not differentiate in beds that way. The only difference from a geologic standpoint is where it goes into porous sedimentary strata you can from geologic knowledge and investigation determine how that porous bed runs within relatively correct limits. But where you are working with an intrusion, the intrusion may be very irregular. It does not follow the same sort of laws that sedimentary rocks do. It is also possible to get oil and water in granite, although you would not look for them there. There may be a weathered surface of granite which is slightly porous.

Q. The question was whether or not in your opinion Mr. Fuller had not differentiated between igneous rocks and sedimentary?

A. No. And I think also his second statement is erroneous.

Q. You do not agree with his second statement as it stands? [722]

A. No; it is too broad.

Q. Did you determine, Mr. Veatch, whether or not

the Elk Hills was a marine formation or fresh water, or part of both?

- A. No, I did not. My opinion is that it is probably both.
- Q. Where you are assuming that you have beds of this diatomaceous shale being deposited, that must have occurred at a time when the San Joaquin Valley was an inland sea?
 - A. Yes, broadly speaking.
- Q. And from what source at that time was the greater amount of sediment derived that was deposited in the beds of the San Joaquin Valley?
- A. Speaking of the deposition of the diatomaceous beds alone, it was derived from the marine algae blown down by winds and currents.
- Q. I am asking you at the time those beds of shale were deposited, where did the greater amount of the sediment come from?
- A. The diatomaceous beds are practically all diatoms, and they must have come from the marine algae.
- Q. And nothing is between any of those laminations?
- A. Yes, there are in places. I thought you were talking about the great thickness of pure diatomaceous shale.
- Q. I am speaking of the deposit of Monterey shale in the bed of that inland sea and of other deposits underlying and overlying the Monterey shales in that inland sea; where did the greater amount of material of those deposits come from?

- A. I don't know.
- Q. Are you able to determine?
- A. I think it could be determined by field examination.
- Q. Is there anything in the topography of the country at the present time that would indicate where the greater portion came from? [723]
 - A. Only in a broad general way.
- Q. Taking it in a broad, general way, what would you say?
- A. I think it is probable that a portion of the Sierra Nevadas were above the surface of the ocean, and supplied some material. I think it is possible that there may have been some ranges to the west of this ridge that I call the Temblor Range which were higher in the hills than the Elk Hills, and those surrounding hills. There are fragments of a peculiar kind of lava, and the nearest place that I have seen from which it could be derived is over west of the Temblor Range. That would point to the land in that direction.
- Q. What is the difference between sediments deposited in the bed of the sea at a distance from their origin and those deposited close to shore?
 - A. The nearer shore deposits are coarser.
- Q. And those that are farther out are usually quite fine?
- A. If you have a stable surface, which seldom happens, you may have your fine stuff all accumulate at some distance in the sea, and the coarse stuff near the shore. But the floor is constantly shifting, and you

will have a floor space extending over great distances.

- Q. As you get further from the shore along the same bed of sedimentation, it becomes finer?
 - A. Not necessarily.
 - Q. Well, generally?
- A. I wouldn't say necessarily generally. We have coarse beds which are of enormous extent—
- Q. Are there any such coarse beds under the Elk Hills?
 - A. I think there are.
- Q. Have you determined whether there are or not?
- A. That is, from geologic evidence that is my belief.
 - Q. From looking at the surface of the ground?

[724]

- A. That is ample in taking the whole geology of the country.
- Q. You say you have not examined the logs of any wells, and you don't know what they show?
- A. No, except to see some coarse stuff around one or two rigs there that evidently came out of the well.
 - Q. You didn't know how deep they came from?
- A. No. And I know the surface of the hills contains some very coarse material which has been transported as far from any probable source as the beds which lie at the base, and the matter of distance from the shore line, the coarseness of the material under those conditions would be the measure of the coarseness of the lower portion.

Q. When there has been a deposit along a shore or any other point, of sediment to a depth of from three to six thousand feet, made up partially of fine silt, partially of coarser gravel conglomerate, and that sedimentation extended over quite a long period of time, what changes in the structure of the strata in that deposit takes place?

A. None would necessarily take place.

Q. Is it not a fact that in all such cases where such sedimentation has been going on until it has built up to the depth I have indicated, there is a marked subsidence and crushing and compressing of the strata on the lower side of that deposit?

A. I don't think that necessarily follows.

Q. Do you know whether that follows in the Elk Hills?

A. What sediment are you talking about on the Elk Hills?

Q. The whole Elk Hills are sedimentary, are they not?

A. I believe so. I don't believe there would be compression there that would affect the oil values.

Q. Is it not also a fact that when there has occurred in some past geological period of time processes which have created or constructed a syncline or valley and afterwards that valley [725] has been filled up by sediment carried in there through the processes of erosions that that sediment after it acquires a thickness of from three to five thousand feet will settle or subside, and that in doing so it will form anticlines near the surface?

Mr Mills—I object to this question and move that all questions of speculative nature along the same line be stricken from the record because they serve only to burden the record with immaterial matters, and shed no light whatever on the issues in this case.

Mr Lewers—I am willing to have all this speculative evidence go out of the record.

Mr Mills—Why don't you quit asking speculative questions?

Mr Lewers—You started it. I admit all this oil business is a gamble.

Mr Mills—If you examine the direct testimony carefully, you will find it is limited to questions on the issues in this case.

A. I should say from your statement of the matter that it would not follow. The compression of a sand bed beyond its original thickness, to any degree that would produce an anticline or a syncline, is a very peculiar proposition.

Q. You think that is not a possible situation?

A. No. If that sand bed contains some soluble material and you took it out by solution, you would have some substance which would produce peculiar little distortions such as occur in Northern New York where you have a solution of salt. But there is nothing in any way parallel with the conditions that exist in this locality.

Q. Is there any reason, Mr Veatch, why conclusions based upon examinations of other oil fields in Wyoming and West Virginia and Pennsylvania or

in Texas cannot be applied to the [726] California oil fields?

A. No two oil fields are exactly alike, so far as my experience shows. But all training or experience of geologists in stratigraphic work fit in for determining the conditions in a new field. Each field must be taken and worked out by itself as a matter of stratigraphic geology. The more experience a man has in stratigraphic geology, the more capable he is of forming a correct conclusion, and the more quickly he can form that conclusion.

Q. The question that I want to get at is this: Whether or not a geologist who has become thoroughly familiar with what you have termed stratigraphic conditions in an oil field, whether it be in California, Texas, Wyoming, Pennsylvania, Indiana or anywhere else is, in your opinion, if he is a competent man, able to determine what you have defined as the oil value of territory in his region?

A. The only difference that could exist between us is the definition of "competent." He would not be competent unless he could, according to my sense of the word "competent." I can imagine a man who has had experience in one region—limited experience—in hard rocks only, for instance—who would probably be very much at sea when he was put into the soft strata the first time; and it might take him a long time to work that out, a time that would be much in excess of what a man competent along that line could do it in. But if he was a good man, he would finally find his feet and get it.

A. Were Ralph W. Stone and Frederick G. Clapp competent?

A. Their experience, so far as I know, was limited to hard rock material in eastern United States. They had no experience in tertiary or cretaceous formations:

- Q. Are they competent geologists?
- A. For what purpose? [727]
- Q. In their particular fields.
- A. On oil conditions in Pennsylvania?
- Q. Yes.
- A. Yes.

Q. Now, in Bulletin No. 304 of the United States Geological Survey, being a bulletin on the oil and gas fields of Green county, Pennsylvania, by Ralph W. Stone and Frederick G. Clapp, issued in 1907, at page 83 under the head of "Prospective Territory," this statement is made:

"In the preceding pages a few hints have been given in regard to further development of the gas and oil fields in this country. It is hazardous to make suggestions of this sort and they should be considered as only of speculative value. The writers are of the opinion that there are yet some areas of considerable extent which might well be tested. The occurrence of gas and oil cannot be foretold, but the following localities are proposed for consideration." Would you agree with that statement?

A. In a broad way. And I might add that Mr. Clapp has since resigned from the Survey and is now

advising Pennsylvania operators regarding those same fields and is getting some very valuable wells, and his deductions have been shown to be correct. And another man who worked in the same region, Griswold, who in printing a paper by the government for distribution, where he had been very cautious about stating the matter, those cautious statements have been so thoroughly proven to be correct that he is now employed by a large number of oil firms at Pittsburgh, all over Ohio, West Virginia and Pennsylvania, and his work is very satisfactory, thoroughly demonstrating the correctness of his opinion.

- Q. Mr. Griswold?
- A. Yes.
- Q. What are his initials? [728]
- A. I don't remember them.
- Q. Isn't it possible, Mr. Veatch, that where you have to chance a guess from surface indications whether there is or is not oil, that occasionally and, possibly, frequently when there are only two guesses you are going to hit it right?
- A. I am speaking simply of the percentage of successful results. No man is infallible in any kind of business. No man of any scientific reputation pretends to be infallible. But a man who is competent will hit it right the greater number of times. His conclusion is based upon scientific facts.
- Q. Then, if he does not hit it the greater number of times, you would say he was not a competent geologist?

A. I think that would follow. If he comes to you and tells you, "This is a good oil proposition," and tells you ten times it is a good oil proposition, and nine times you find he is wrong, I think he would be thoroughly condemned. But when such a man as Mr. Youle tells you it is a good oil proposition and the whole thing proves out, I think there is a different conclusion.

Q. Mr. Youle said the only test of an oil territory is the drill.

A. I agree with that in the way that I have explained. I think there is no conflict whatever.

Q. And Mr. Youle also stated in a portion of the testimony read to you yesterday that geologists who understood their business no longer make predictions.

A. I have explained that matter before. Shall I go into another explanation?

Q. No, I think not. In your direct testimony at page 1371, in speaking of whether petroleum is a mineral or not, you made this statement: "In attempting to give a scientific meaning to the word 'mineral,' some scientists have defined a mineral as any substance of inorganic origin of definite chemical compostance of inorganic origin of definite chemical compostance of inorganic maturally within the earth. If this definition is followed out strictly, it would exclude everything in which organic matter has been a factor in its formation. Many deposits of iron ore will be excluded." As a scientific man, do you think that is a fair statement?

A. Yes; I think that definition followed logically to its ultimate conclusion leads to an absurdity.

Q. And you think the instance that you have given in reference to iron is a fair comparison by which to determine whether oil is mineral?

A. I simply say if the matter is followed out strictly, that is, to the extreme, it leads to an absurdity.

Q. How is iron formed when it occurs in beds as you referred to?

A. You take the matter of iron carbonate, for instance, in whatever soluble form it may be carried down to the lake, there is a reaction between that and vegetable matter or products of vegetable material. It is called a bog ore for that very reason, and the result is a precipitation of the iron as an iron carbonate at the bottom of the lake. The vegetable matter is a factor in the formation of the ore.

Q. What did the iron come from originally?

A. I don't know. It may come in differnt forms.

Q. Is it not a fact that that iron occurs in a great many rocks in the shape of ferric oxide?

A. Yes.

Q. That is a higher oxide of iron?

A. Yes.

Q. And is it not a fact that that is generally insoluble?

A. Yes.

Q. And when it comes in contact with decaying organic matter, a portion of the oxygen, in the pres-

ence of carbonic acid [730] gas, is thrown from that iron and forms a ferrous oxide?

- A. I don't know that the presence of carbonic acid gas is necessary. But, in a general way, there is a reduction of the iron from ferric to a ferrous state, due to the action of vegetable matter.
- Q. And when it is in its ferrous state it becomes soluble in any medium where water is present and where carbonic acid gas is present, and forms iron carbonate?
 - A. I don't know that that is necessarily true.
 - Q. It does form iron carbonate?
- A. It does when it comes down to the lake. But my general recollection is—it is a long time since I dabbled in chemistry—it forms a compound with humic acid and comes down in a soluble form. If the carbonate was soluble, there would be no precipitation in your lake.
- A. And doesn't it later, when it has an opportunity to acquire more oxygen from any source—the air or otherwise—form ferric oxide again and deposit as such?
- Mr. Mills—We object to any further examination along this line because it tends to obscure the issues in this case, as many of the questions have repeatedly done, and it is wholly irrelevant to any issue in this case whatever.
- A. You have frequent changes of form in the various iron salts, generally, with the aid of vegetable matter, which is an important factor in the reaction.

Q. By Mr. Lewers—Isn't the iron deposited in the form of bog iron ore, in the form of ferric oxide?

A. Bog iron ore, I think, is a carbonate.

Q. Isn't it a fact that the iron is deposited in its original form and that the organic matter simply furnishes a means to assist in the change or transition period—

A. I should say it is not in its original form. You have [731] started, certainly, with ferric oxide, and you have got as a result the carbonate. They are not the same form.

Q. You think carbonate is the final form of bog iron?

A. Yes.

Q. And not ferric oxide?

A. Certainly it is not an oxide; it is a carbonate.

Q. You are positive of that?

A. Yes.

Q. Does any such process occur to your mind whereby petroleum is in existence and is simply deposited as the result of organic action?

A. It has been argued by a number of scientists that petroleum is produced by direct reaction on the iron carbides.

Q. Do you believe that is true in California?

A. No.

Q. Then what does produce the oil in California?

A. I have stated several times that it was not susceptible of exact proof, but that it comes from the diatomaceous shales and the fact that there is the greatest thickness of the diatomaceous shales in this

whole region in the Elk Hills country makes that the most valuable oil territory from that line of argument.

- Q. Did I ask you anything about the Elk Hills?
- A. It could mean nothing unless it is related to the Elk Hills.
 - Q. You are anxious to tie it to the Elk Hills?
 - A. That is what it should be tied to.
- Q. Very well; we will tie it to the Elk Hills. What does the oil come from in the Elk Hills?
- A. I believe it comes from that series of diatomaceous shales.
- Q. Do you know whether there is any oil in the Elk Hills? [732]
- A. I believe there is. I have stated that repeatedly.
 - Q. But you don't know it?
- A. I stated that I would not guarantee a man to find oil. No reputable geologist would. But the conditions were such as would justify him in spending money in acquiring the land and developing a well; that it is certainly oil land.
- Q. I think I have heard that before. Is petroleum as it exists in California—I mean petroleum that we do know exists—original mineral in its origin or is it organic in its origin?
 - A. I think it is mineral in its origin.
 - Q. From what mineral does it come?
 - A. From the diatomaceous earth.
 - Q. And diatoms are mineral?

- A. I think so.
- Q. And not organic?
- A. A thing can be both organic and be a mineral. That is, of ultimate organic origin.
 - Q. Are diatoms organic?
 - A. They were originally part of organisms.
 - Q. They were alive originally?
 - A. No; the material around them was alive.
 - Q. They were not?
- A. They were part of the material. To say that a thing itself is alive would be untrue.
- Q. Suppose upon a favorable bed of sand along the sea shore—in the early history of the Elk Hills, we will say, there was a favorable bed of sand, when that was an inland sea in the San Joaquin Valley, and we will further assume that that sea had a hundred whales, and those whales by some force of nature were thrown up on that bed of sand and died there, and the oil in those whales' carcasses leached out into the sand on that shore and later further deposits came and buried those sands, would [733] you say that that oil from those whales in those sands was mineral?

Mr. Mills—Are you going to contend seriously that petroleum came from a hundred whales?

Mr. Lewers—If there is any there it must have come from those whales.

Mr. Mills—If that is part of your defense, I would like to know it.

- A. I should say your supposition is impossible.
- Q. By Mr. Lewers-Kindly take my supposition.

A. I cannot, because it is impossible. I cannot conceive it. If your whales are on the seashore, thrown up on the bed of sand, and decomposed, the sea water will take off every bit of oil that is there. It won't stay in the sand.

Q. Is that the way you answer my question? Is that the only answer that occurs to you? I am asking you as an expert, and I am making an assumption which is a possible one, though to you it may not be a probable one—

Mr. Mills-What he knows about whales.

Q. —That the oil from a hundred whales does leach out into the sand—

A. Are you going to have your whales buried before this leaching occurs?

Q. It makes no difference whether they are buried or not. The oil from the whales goes into the sand.

A. It cannot unless they are buried.

Q. Let us assume that they are good oily whales to start with, and then that is covered over. Would you say that if you found that oil in that sand at a later period that that oil was mineral oil?

A. I would say yes in a general way. But I want to explain how that could happen. If you have your whales thrown up on the [734] shore as you describe, and you have them then covered with a thick layer of clay before these whales decompose, and those things are buried there, you have a slow distillation of the oil which is entirely different from the distillation of sperm oil in the kettles on a whaling ship.

You have various chemical reactions taking place. There is salt water in the bed. There are clays above it. And you have a resulting oil which is mineral oil and very different from sperm oil.

Mr. Mills—I want to interpose an objection here to all questions tending to develop counsel's argument of the whale theory as connected with the Elk Hills.

Mr. Lewers—I am coming to something else that you can understand.

Mr. Mills—Perhaps you had better get to something else and get to a lobster theory. If you seriously contend that the oil taken from that Associated well came from whales, I would like to know it. If not, we ought to discontinue it because it is becoming slightly trivial.

Mr. Lewers—I believe the entire theory announced by the government is in that respect more than slightly trivial.

Q. Then, even though the oil in its origin is organic—from animals—you think that the process of distillation has gone on and it becomes mineral?

A. Sure it does. You take a bed of coal, for an illustration. A coal bed is not a growing tree, although it may have been derived from a tree. It certainly is a mineral and certainly is not a tree.

Q. You have no other comparisons except coal that occur to you?

A. Yes. Take a bed of limestone, which is made up entirely of shells, which are of organic origin.

Take a bed of phosphate, which is made up of phosphatic material derived from animals, [735] and it is mineral. You have a great series of substances in which organic matter has played an important part and in a great many cases forms a whole bed. You can have a limestone composed entirely of organic material, and yet when you burn that and get commercial lime, that is a change from its original organic condition, and the commercial lime is a mineral of definite chemical composition.

Q. No difference occurs to you in a process which takes the mineral and simply decomposes it through the aid of some organic influence, and a process whereby the organic organism is itself merely altered in form?

A. Are you referring to shells or diatoms?

Q. I am referring to the oil and iron and limestone.

A. No; I think they are all minerals and commonly so accepted.

Q. You make no distinction in the regions of bog iron and of petroleum so far as the determination of the respective mineral characters are concerned?

A. They are both mineral.

Q. Why was it that for a great many years and even now petroleum was called coal oil?

A. That was because it was supposed by some people to be derived from the coal in Pennsylvania. That is proved not to be the fact in any way. It is not connected with the coal, and the name is a misnomer in that respect.

Q. And at one time that was a very common supposition, was it not?

A. I don't know that it was. The earliest scientific reports on that never mentioned it as derived from coal in any way. If you refer to the scientific accounts, they refer to fish in the Devonian and refer it to the different organisms in the Devonian and Silurian rocks, but never connect it with [736] coal.

Q. In your direct testimony at page 1371 you state: "Under this definition coal is not a mineral, since it is clearly of organic origin. That Congress had no such restricted definition in mind when it used the word 'mineral' is shown by the fact that it found it necessary to expressly grant coal to the railroad." Was that statement to your mind when you made it a statement of scientific conclusion, or was it a legal argument to support the government's theory in this case?

Mr. Mills—Let me finish the statement first. "Because under this restricted definition coal is not a mineral since coal is an organic article."

A. I think that is purely a matter of scientific deduction. Because given a certain group of words, what does that group of words mean? That sort of deduction is not a matter of law.

Q. Then what Congress meant is purely a matter of scientific deduction?

A. I think it is a matter of simple common sense.

Q. The grant in this case to the Southern Pacific Railroad Company passed July 27th, 1866. On the same day Congress ratified a treaty with some Indians, in which treaty it was provided that—

Mr. Mills-Please state what treaty you are referring to.

Q. By Mr. Lewers—In which treaty it was provided—

Mr. Mills-I ask counsel to refer to the treaty.

Mr. Lewers—I shall ask the question as I wish.

Mr. Mills—I think it is only fair to counsel on the other side to state when you refer to public acts to give the date and the title of the act.

Q. By Mr. Lewers—In which treaty it was provided that a person in occupation—acual occupation—of any land held by the Indians, non-mineral in character, would have a right to [737] purchase the land he occupied, and a portion of such land had underlying it a well defined and well known and extensive body of coal. In your opinion as a scientific man, would the person occupying that land be entitled to purchase it as non-mineral land?

Mr. Mills—I advise the witness that he need not answer the question until the counsel shows what he refers to.

A. No; land underlain by a good workable bed of coal is certainly coal land. '

Q. By Mr. Lewers—And in your opinion Congress intended in that case where it ratified the treaty on the same day that it passed this act, to include the word "coal" as a mineral?

Mr. Mills-You need not answer that question till

counsel is fair enough to state what act he is referring to.

Q. By Mr. Lewers—Will you kindly answer the question, regardless of the interruption?

Mr. Mills—I advise the witness not to answer the question till you state what act you are referring to.

Mr. Lewers—I except to the instructions given by counsel for the government to the witness, as an obstruction of the cross-examiantion and as misconduct on his part.

Mr. Mills—I except to your method of examination, referring to public acts and being unfair enough not to state to opposing counsel what act you refer to.

Mr. Lewers—I don't think it is a matter of any consequence to the witness as a scientific expert what act I am referring to.

A. I would have to see the act and read the whole thing to be able to answer you intelligently. Have you the act where I can look at it?

Mr. Lewers-I have not.

Mr. Mills-Did you ever hear of the act?

Mr. Lewers—I have. [738]

A. But I should say that in an unqualified statement, not qualified by anything in the act in any way—

Q. That is the fact. "Allowed to purchase non-mineral land." That is the statement.

A. Land underlain by good beds of coal is certainly mineral land.

Q. As a scientific matter you would say that that

would include at that time as mineral the coal that was under the land?

Mr. Mills—The witness has stated that he cannot give you any response to that question.

Mr. Lewers—I think he has already given the response. Now, Mr. Mills, if you are very anxious to know, I will give it to you. You will find in the case of Stroud vs. the Missouri Pacific Railroad Company, decided by the Circuit Court of the United States and reported in 4 Dillon, page 396, a decision of that court to the effect that the words "non-mineral" in that treaty did not include the coal in the land.

Mr. Mills—I am very grateful to counsel for giving me the citation.

- Q. By Mr. Lewers—Then it would appear that Congress sometimes was not thoroughly scientific, or that the courts in interpreting the acts of Congress were not thoroughly scientific.
- A. The conclusion is still the same, that non-mineral excludes coal as a scientific matter. There is no doubt whatever and no doubt can exist. The only matter in the question of classification, which I have brought up repeatedly, is the matter of the relative worth of the land, which may have been an important factor in that case. It is certainly mineral land. You said that there was known to be a thick bed of coal beneath the land.
 - Q. Now, Mr. Veatch, you have made frequent and repeated comparisons between oil deposits and coal deposits and have, in [739] answer to questions by Mr. Mills, found the source of your horizon zone the-

ory, or what I have so termed, in coal deposits. Can you mention any writer on oil geology who has ever made that comparison?

A. No. The only comparison on coal is in that Geological Survey report, and that was discussed very carefully by people who were very familiar for a great many years with coal, and there has been no bulletin published regarding the valuation of oil lands.

Q. The question I asked you was whether or not you know of any writer or any geologist in any publication who had applied this zone theory or horizon theory to oil?

A. I think not.

Q. Isn't it a fact, Mr. Veatch, that one great line of distinction between a lode deposit on valuable mineral and a coal deposit is that one occurs in sedimentary strata and the other in fissures, ordinarily through rocks of igneous origin?

A. In what sense do you use "lode"?

Q. Gold, silver, copper.

A. They certainly differ, in the case of copper. There are impregnations of copper in limestone.

Q. Let us take gold and silver.

A. In that respect they are the same. Where anything occurs in stratified deposits the general laws as to stratified deposits follow; and with a great many lode deposits that is not so.

Q. And they most commonly occur in fissure veins?

- A. There are certainly deposits of that kind.
- Q. And those are the most frequent?
- A. I don't know as to that.
- Q. And some element of uncertainty in the prediction as to the occurrence of gold and silver values arises from the fact that they do occur in fissures rather than in sedimentary [740] beds?
 - A. Yes.
- Q. Then is there not some analogy between oil deposits and lode deposits, in that oil which may exist or may have originated in shale sedimentary deposits must get to the reservoirs where you find it and can extract it, through fissures and cracks very frequently?
 - A. I think there is no analogy there.
 - Q. It is a fact, is it not, that in the economic production of oil you do not produce the oil or extract the oil ordinarily from the shales in which it is formed?
 - A. You assume that all oils are formed in shales, and I am not at all sure that that is the fact. The fact is I believe otherwise.
 - Q. I will change the question, if you don't like that assumption. Is it not a fact that you do not ordinarily as an economic proposition extract the oil from the formations, whether shale or something else, in which they are originally formed?
 - A. You extract the oil from a porous bed. What the relation of that porous bed is to the source, varies differently in a great many different regions.
 - Q. And in many cases that oil may have traveled a long distance from its source?

- A. Yes, just as with water.
- Q. And in many cases it travels through fissures or cracks?
- A. I don't know that that is true. I think that probably occurs in some instances.
- Q. And if that oil is formed originally at the base of a series of diatomaceous shales which is overlain with a great thickness of either shale or some other sedimentary deposit before you reach the sand bed that will serve as a reservoir, [741] it is necessary, is it not, that that oil find some means of getting through those beds to reach the sand?
- A. In the first place, I don't believe you could prove that it originated from the base of the diatomaceous series—
- Q. Mr. Veatch, will you kindly answer my question as I have given it? I have assumed that it comes from there. Can you answer that question as a scientific matter?
- A. I think it is possible to come up without any fissuring of any kind, as a scientific proposition. Even in the densest shales you have diffusion of oils where there is no break in the shale. It is a scientific possibility.
 - Q. And comes through at right angles?
 - A. Yes.
 - Q. For what distance?
- A. It depends on the matter of time in which the oil has to pass through it. It must pass very slowly. But in geology you are dealing with very large time-

factors. It is a great many eons, probably, since this thing started.

Q. Can you mention any place in California where development of any field has shown that such a thing has taken place?

A. As I stated when you interrupted me, you cannot demonstrate beyond any doubt that this material comes from those diatomaceous shales. And, if you cannot demonstrate that, you cannot demonstrate what portion of the bed it comes from. In the region involved the evidence is that it comes in greater volume from the upper portion of the shale for the reason that the great deposits of oil are in the porous beds above it and not in the porous beds below it.

- Q. That is the reason you draw that conclusion?
- A. Yes; that is the fact in the ground.
- Q. Water is a mineral, is it not?
- A. Yes, in some classifications. [742]
- Q. Would you term land that from geological examination you determined would produce water in artesian flow, mineral land?
- A. No, for this reason: That water is necessary to plant growth. It is an integral part of the agricultural value of the land, and in that respect it differs entirely from oil.
- Q. Then, assuming that a particular territory in question was more valuable for the extraction of water than for other purposes you would not call that mineral land?
 - A. I think there is a question there. If the wa-

ter is used on the surface there, I would not call it mineral land. A case can arise where it would be mineral land.

- Q. Then there is some land which is more valuable for its mineral contents that you would not call mineral land?
- A. I have explained the way in which water is differentiated from oil. I have explained also that in the case of the clay bed, if the clay is more valuable for growing a crop, there your crop is using the mineral. The surface of all lands is mineral, and the distinction must be drawn and is drawn in every fair-minded man's mind between the material which goes to make a crop and the minerals which are extracted and exploited as minerals. In one case man extracts it; in the other case the plant extracts it.
- Q. Now, suppose that in the vicinity of a hot spring or a series of hot springs there existed a deposit of gold in the shape of a fissure vein, containing gold which assayed high enough so that if it occurred anywhere else it could be worked at a profit; and that if that gold were extracted at that place it would produce more profit than any other use to which that land could be put; but that owing to the proximity to the hot springs and to the great heat encountered in developing that property, it is impossible according to any means now known to work that ledge for gold; and suppose the land had some value [743] to produce some income for purposes, not mining, in their character. In your opinion would that be mineral land or not?

Mr. Mills—I wish to object to this question because counsel has gone into the question of lode deposits and value of lands from their mineral or agricultural character fully at a previous session, and also I think it is rather unfair in view of the statement made by counsel that all he wanted to ask the witness yesterday was upon the bulletin, and I think the examination now should be confined to the redirect—the subjects brought out by redirect—and not rehash all this immaterial matter.

A. How do you know it would be more valuable for gold if you cannot extract the gold? Your assumption is impossible.

Q. By Mr. Lewers—Is that the best answer you can give?

A. It is a perfectly fair answer. Your question assumes an impossibility and I am pointing out to you that it is. Assume something fair.

Q. If you will kindly pay attention to the question and forget for the moment that you are anything else except a disinterested expert—

Mr. Mills—I object to any innuendoes made by counsel in that statement,—constantly asking him to pay attention to questions. That is all he has been doing for three or four days.

Q. By Mr. Lewers—and assume as a demonstrated fact that there is exposed and developed to a depth to show a high degree of probability of its persistence downward, a ledge carrying gold and assaying five hundred dollars a ton, but that owing to its proximity to a hot spring or series of hot springs it

is impossible, according to the means now known, to go down any deeper on the depth, although all the surrounding conditions demonstrate that that ledge does go down and does contain a large body of ore, and the land has some value for purposes other than [744] mining, although slight. Would you say that that was more valuable for mining?

A. I should say that you could not determine that that ledge went down in the way that you have described and therein your ledge differs entirely with beds occurring in stratified deposits.

Q. You are unwilling to take the assumption of the proven facts?

A. It cannot be proven in the way you have stated.

Q. Let us assume that it does go down for a distance of five hundred feet as shown by borings.

A. If a man could develop it partially, I think he could develop it entirely.

Q. And we will assume further, as my question does, that according to any means now known it is not possible to work that lode to its proven depth, although it contains values as shown by borings down to that distance.

A. Values of five hundred dollars per ton?

Q. Yes. Is that mineral land?

Mr. Mills—I want to ask Mr. Lewers a question. Do you insist on continuing this examination, when you stated to me that you concluded yesterday, any farther?

Mr. Lewers—Your statement made now is, as you must know, totally unfair. I said that there was a

question concerning a bulletin and certain other matters.

Mr. Mills—Then I shall certainly announce to you here and now that I shall call the attention of the court to what I regard is a deliberate attempt on your part to obscure the issues in the case.

Mr. Lewers—You are welcome to do that. I shall certainly not be silent when the time comes.

Mr. Mills—If the court were here I should certainly take it before the court now and see if you are permitted to take up [745] all this time. I regard it as an abuse of your privilege.

A. Yes; because if there was proof of the thickness that you describe of ore, having a value of five hundred dollars to the ton, I would trust American ingenuity to get it.

Q. By Mr. Lewers-At some time?

A. Yes, and in the near future too. [746]

JOHN CASPAR BRANNER, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

My residence is Stanford University, California. My age is sixty-one years.

As to my experience and training as a geologist, I will say, I was educated as a geologist at Cornell University. Left there in 1874 to go on the geological survey of Brazil, South America, and I remained in that country doing geological work about eight years. Then I came back to the States, and after a couple of

extra trips to South America and doing other kinds of work-natural history work-I went onto the geological survey of Pennsylvania, and worked there for two years in the anthracite coal regions, as assistant on the Pennsylvania geological survey. then made Professor of Geology in the State University of Indiana and was engaged as professor there for two years, although I held the position for several years more: I was on leave of absence. I then went, in 1887, to the state of Arkansas, where I was state geologist, and held that position until about 1893, I think it was. In 1892, however, before the expiration of my term of office, I came to Stanford University as Professor of Geology and have been there ever since. I was a member of the United States Geological Survey for several years; I don't remember now how many years. I think that embraces the principal facts.

I have had experience in the oil fields of California. I have worked in the geology of California almost ever since I first came to this state, in February, 1892. All the geological work that I have done here has borne more or less directly on the oil geology. I have visited different parts of the oil fields and have occasionally been employed to report on oil properties.

I reported on some property in what is known as the [747] Temblor Range northwest of McKittrick, I think. I am acquainted with the oil fields of Coalinga, McKittrick and Maricopa. The main fields are along the eastern flank of the Coast Ranges, running down from north of Coalinga and lapping back against the Coast Range clear down to the southeast end of the San Joaquin Valley.

I made my first trip into the McKittrick District in 1900 when I observed the physical condition of the eastern flank of the range on the McKittrick front. As to the stage of development and the physical evidences there, I noted that from McKittrick northward to Temblor, I simply noticed that there were a good many oil wells there at McKittrick, that there were some along the road I went in going up to Temblor, but that there was quite a stretch of country between those wells and Temblor in which there were no oil wells—there was very little development in there at that time.

I noticed evidences of natural waste of oil; there were oil seepages all the way from McKittrick, here and there, clear up to Temblor; that is, here and there; of course they did not go all the way.

I know the group of hills east of McKittrick called the Elk Hills. During my trip in 1900 I simply noticed those hills, but I did not pay any particular attention to them at the time and I did not go out into them.

I made an examination of the Elk Hills the first time I noticed their geological structure—I don't think I can tell you exactly the year, but it was possibly a couple of years ago, when I went around the south end of the McKittrick or the Elk Hills. The geological structure was perfectly clear at that time. Since then I went across the Elk Hills, and I went

from McKittrick up to the top of the mountains west of there, and then went across the hills themselves—that is a few months ago—in [748] order to see the structure.

On those recent trips I formed an opinion as to the geological structure and as to the character of the Elk Hills for oil. That opinion was based on my general knowledge of the behavior of petroleum in the rocks; on my observation of the general geologic structure of the entire area that I went over. The structure seemed to be perfectly simple—the general structure, of course, I mean was perfectly simple; and the conditions for the accumulation of petroleum were favorable along certain folds that were easily seen by any geologist.

My opinion was that the Elk Hills was the most promising area for petroleum in that region in the vicinity of McKittrick. I formed the opinion that it was oil-bearing. That opinion was confirmed to a considerable extent by the developments that had taken place there recently, but everything seemed to fit together; that is, the geologic structure, the development of the wells, the occurrence of the oil seepages, and everything, pointed to the Elk Hills as a promising field for the finding of petroleum.

I observed at that time that there was identity in the slope of the surface of the Elk Hills in the structure. As the erosion cuts down into the sedimentary beds, the more resisting character of some of the beds very frequently brings out the geologic structure by leaving the rock surfaces exposed so

that they look like shingles on a house, or something like that. That is, the shape of the topography, the slope of the hill, will frequently in those cases give the dip of the slope or rock beds. And I noticed especially in going around the south end of the Elk Hills, that the structure was very striking as seen from that position. That was a year or two ago. And then in the last trip I made through there a month or so ago, I noticed the same thing again in other parts of the hills. I would say that, apart [749] from any works of man recently in the hills, such as derricks or roads, from the observations I made in the last two trips, that the hills were substantially in the same condition that they must have been in 1900; decidedly so. No changes except the ordinary process of erosion, which is very slow.

Had I gone into the Elk Hills in 1900 I would have arrived at the same opinion as to the character of these lands that I did on the later trip; decidedly so. The lands were favorable for the accumulation of oil and I should say that they were oil in character.

I should say that if any competent geologist, observing the natural waste of oil about McKittrick and the stage of development in 1900 or a year or two subsequent, and visiting the Elk Hills and making some examination of the structural formation, failed to form an opinion that the Elk Hills were oil in character and that there was an oil-bearing zone underneath those hills, he did not understand his business.

As to the purpose for which a large company engaged in the oil business were employing a geologist I would say, of course, it would depend on the terms of the employment. If he had to do with the location of oil wells, or the determination as to whether or not lands that the company proposed to develop were oil lands or whether they were not, or whether lands that they proposed to sell were to be valued as oil lands, or whether lands that they proposed to buy were worth anything as oil lands, I should think that the company would naturally depend on the opinion of a geologist to determine that question. I don't know of any more legitimate use that a geologist could be put to.

After examining the map known in this case as "Government's Exhibit I", and taking into consideration the development shown in this map in 1904 and the geologic structure of the region, I would not, in 1904, have advised a company employing me [750] to sell lands in this suit for their agricultural value, and I would have advised that company to acquire the lands at a price in excess of their value for agricultural purposes.

During my work as head of the Geological Department in Stanford University, I have frequently been applied to to recommend students of mine who have had a course in geology and have recommended them to do geological work; and quite a number of my students are engaged now in that kind of work in the petroleum fields of California. Ralph Arnold is one of my students. He reported on the geology of the

petroleum fields of California for the United States Geological Survey, and has written several reports on the different fields. Harry Johnson was another of my students. He worked with Mr. Arnold and also published separate reports. Robert Anderson, who now has charge, I think, of the petroleum work in the state of California for the United States Geological Survey, was one of my students. Then the geologists for some of the petroleum companies have been my students. Mr. W. Orcutt, I think, is connected with the Union Oil Company. He was a student of mine, although he did not graduate in geology. Another man is Rolly Hamilton. He was the geologist for the Associated Oil Company for some years. He is now connected with some other company, I have forgotten which one. W. Williams, I think, is now the geologist of the Associated Oil Company. Mr. E. B. Kimball is geologist and engineer for another company and there are several others-Robert Moreland was geologist for the Standard Oil Company for some time; now doing private work. I am reasonably sure that the Standard Oil Company employed him on my recommendation, although it did not apply to me directly.

I think practical men invest money in oil territory in advance of drilling on the advice of geologists, and I regard that practice as fully justified by the results.

On the trip I took into the Elk Hills this year, I saw [751] oil seepages in one locality—perhaps I might say three or four localities close together—at one place near the axis of the fold of the hills. Per-

haps, to do justice to the case, however, I will state that I did not attach and do not attach any particular importance to that seepage. I should have considered the place oil-bearing land just as promptly without it as I did with it. It would simply be confirmatory of my opinion based solely upon the geologic structure.

CROSS EXAMINATION OF JOHN CASPAR BRANNER.

In passing upon the character of the Elk Hills, I did not determine in any way the quantity of oil and made no attempt to do so. I could not have done so from the examination I made. That could only be determined by puttitng down wells. One well might determine the matter and it might not. Development is required to determine whether or not that is a valuable oil deposit.

A geologist does not determine the economic value of the land for oil. All he undertakes to do is to say whether or not the land has prospective value. I mean by prospective value, that the company proposing to develop that region should take it up—buy it, if necessary—and put down a well on it, should prospect it. I can best illustrate my idea of it by saying that I have considered it a reasonable investment, or, if you please to call it so, venture. I should have advised anybody who might have employed me to report on those propositions, to buy the lands with a view to developing them as petroleum lands, from

the surface indiactions and my knowledge of the surrounding conditions and of the oil formations in general. I could not, when I first examined the land, have given an assurance that oil in valuable quantities could have been found. I could do so now on the basis of wells that have been put down there and have found oil. On [752] the basis that in only two cases out of twenty-eight wells, some of them four thousand feet deep, indications of oil had been found, and in those two cases oil had been found in quantities not sufficient to make these particular wells profitable, I would not hesitate to advise operators to go ahead with prospecting. In the first place it depends on how those wells were located. If the wells were put down without reference to the geologic structure, they might go to an enormous depth without getting oil, and yet, they may move off to one side and put down a well, within a thousand or two thousand feet, and get entirely different results. still, I may add, the general structure of the Elk Hills is so favorable to the accumulation of oil in that region that if they had gone to five thousand feet and not found the oil, I should still advise a company to not give up hope of finding it.

The greater part of my field work since I came to California has had some relation to oil geology. The oil in the California fields originally developed from a series of beds that were known in geology as the Monterey shales—a series of rocks made up of the skeletons of diatoms that have accumulated in great quantities, especially about the Southern end of the

San Joanquin Valley. These rocks were given the name "Monterey Shales" because rocks of the same age and general character occur at Monterey in this state. It is a local name.

The Monterey shales belong to the Tertiary period and occur in many places in California on the east side of the Sierras. All of the Monterey shale is not of the same character. Sometimes those diatoms have had mixed with them a good deal of clay and fine sand. In other cases there have been volcanoes in existence at the time those shales were being deposited and those volcanoes have thrown out great quantities of ashes that have floated and settled in the water so that as the diatoms have gone to the bottom, these diatoms have mixed up with the deposits so that they are not pure [753] diatoms but are contained with these volcanic ashes mixed in with them. In other words, you have some pure beds of diatoms, that is, with nothing but daitom skeletons; in other cases you have diatoms with ashes; in other cases the diatoms are mixed with fine sands; and in other cases they are mixed with volcanic ashes.

I do not see any reason why shales deposted in deeper salt water and those deposited in fresh water should not both produce oil, as a matter of fact. I do not see that the possible depth at which the shales were deposited ought to influence it in any way. I don't see what that would have to do with it. As a matter of fact as you can see from what I have said about the origin of these deposits, they float near the surface of the water, and, as those plants go to pieces,

die, they will sink wherever they are—that is, they will sink in shallow water, you see, and in deep water—and I do not see why the same rule should not hold to fresh water deposits, except as fresh water deposits are more limited in quantity. In the case of marine deposits, you see, we have these currents sweeping down from the north and they have simply been pouring in here for millions of years from the same source and accumulating where the coastal conditions were favorable, whereas, in the case of fresh water deposits your diatoms go right in the water, the lakes and ponds—they are very common in pools, marshes and ponds—but you see that the chance there for a thick accumulation is comparatively small.

It has been my experience from my observations that oil in California has been derived from other formations than Monterey shales. I should say that the term "Monterey shales"-To say that oil was all derived from Monterey shales would be a mistake. I instinctively, in looking over lands that I have been called upon to examine for petroleum, have looked about for these diatomaceous shales. Now, those diatoms, you can see from the nature of the case, have been accumulating for an enormous period of time, and [754] they were not necessarily confined to the time in which those Monterey shales were being heaped up; so that we have older beds that have diatoms in them, and we have the later beds, and wherever I have found marine diatoms accumulated in considerable quantities, I have considered that

there was a legitimate place to look for petroleum, whether they happened to be in that particular age or earlier or later.

In some instances it is difficult to determine whether oil has been produced from a particular shale or from underlying or overlying that shale.

As to whether all the portions of a bed of Monterey shale would be equally producing I will say that these diatomaceous shales, being the source of oil, the oil does not as a rule stay in those beds. It passes out into an absorbing bed-a porous bed-where the oils accumulate. Now, the accumulation, therefore, depends on the presence of diatom beds to furnish the source, but the accumulations themselves, as you see, depend on the nature of the beds into which those oils pass; and you may have no beds there to receive that oil. The conditions may be unfavorable and the beds overlying them into which that oil can be expected to pass may vary in texture so that the oil accumulates more in one place than in another, so that the oil beds may be pockety even under conditions where you have diatomaceous beds of great thickness and evenness.

It would be difficult to say whether a particular part of these diatomaceous shales had produced oil any more than any other part. I should not think it would be possible to do that. That phase of the question never occurred to me. I generally assumed that the oil in those beds has passed off somewhere, and if the conditions for accumulation are favorable, that the oil would be found there, and if the conditions

were not favorable, the oil would have disappeared. [755]

I think geologists know pretty well what the conditions were under which these diatomaceous beds were laid down. But we are not surprised at all to find, in tracing out these same beds over a large area, that in some places they are gone entirely—that there are not any—that they have been removed by erosion or that they were not deposited there at all; or, if they were deposited, they were deposited rather thinly and erosions removed the thin edges of the beds. I don't think there is much question about the geographic and physical conditions under which they were deposited.

As to whether there are any Monterey shales in California that do not yield oil, I will say, I don't know with absolute certainty whether that is true or not. I have found, for instance, in the coast ranges in,—in the Santa Cruz Range—between the Santa Clara Valley and the ocean there, that there are here and there in beds Monterey shale; and prospecting has been done for petroleum, but they frequently find not oil in paying quantities, but a little bit of it in those places. And they are usually places where the deposits are rather thin and, I should say, at first blush, that they are not places that are worth while prospecting.

By thin deposits I mean twenty-five or thirty feet thick, or something like that. Of course, you have to bear in mind, in connection with that statement, that those same beds down towards the southern end of the San Joaquin Valley have a thickness of over five thousand feet, and a great thickness like that immediately would make a competent geologist prick up his ears, because he would say, "Here is a chance for an enormous accumulation of oil."

The thinness of the deposits may indicate that they were originally so, or that they are the result of erosions and changes. If they occur so that you have some other kind of rock [756] underneath the shales, and then a thin layer of ten or fifteen or twenty or thirty feet or so of those other shales, and then another kind of rock such as sandstone or conglomerate or almost anything else, overlying that comformably-fitting down over it-without any evidence of erosion, you would say they never were deposited there. But if you find these shales exposed at the surface, of an irregular surface, evidently cut in two by streams,-in a case of that kind you would say, "We don't know how thick those beds are, unless we can get the evidence around in the neighborhood". because in that case the thinness is due to erosion.

When I first went into the McKittrick District in 1900, I visited the Temblor Range. I had two assistants working with me to do topographical work, and we were mapping an area of several square miles, in detail, and my impression is I must have been there something like ten days or two weeks working on that geology.

I made quite a careful examination during that period for the purpose of reporting on oil possibilities and reached the conclusion that there was oil, probably in paying quantities, on the property, if the wells were put down at certain points; and I located the wells and they found the oil, but I cannot say whether in paying quantities or not. From my surface examinations I could not determine with any degree of exactness whether there was oil there in paying quantities. That had to wait the test of the drill.

After 1900 I was not in McKittrick until two or three months ago. I was up around Maricopa and Taft and that part of the country, and the Buena Vista Hills, a couple of years ago. My attention was not called to the Elk Hills at that time further than I would naturally notice in driving past there. I noticed the formation and drew my conclusions as to an anticlinal structure there. I had no occasion on that trip to make any particular [757] examination of the Elk Hills. I examined the Buena Vista Hills and reported to a firm of lawyers in Los Angeles. whose names I do not remember. I don't remember the sections examined on that occasion. There were several of them. I examined some lands through Sections 1, 2 and 3, I think, in 32-24. I was not there more than three days, I should say. I prepared a written report as to the result of that examination. which I sent to the lawyers mentioned above.

At that time there was drilling going on in the Buena Vista Hills, there were a good many derricks around there and I think oil had been struck in the Buena Vista Hills. My impression is that oil had been obtained in one well.

Last February I spent part of one day near the center of the Elk Hills. I was there two days in that vicinity. We drove out from McKittrick up through 30-23.

On that occasion I went to what has been referred to as an oil seep. Near the middle of the northwest quarter of Section 32-30-24, about on an anticline, are oil seeps. I did not attach much importance to that seep. I felt so confident of the importance of all that property for petroleum, and my experience with oil has been that if you have an oil yielding horizon or bed, covered over with a thick impervious stratum, that it may happen that the evidences of oil itself will never come to the surface, and that you could, in a region that was otherwise favorable, advise companies to put their wells down absolutely regardless of whether there is any seepage there or not, and if I found the seepage there, I should simply say to myself that it is more or less confirmatory of the other things.

The seepage was important as an indication of what was underneath. I did not, on that occasion, have any test made of that seepage.

It is a little difficult to say in how many places [758] seepages were found because sometimes you have a slope of the hills where the soil or sand has crept down over and concealed the outcrop, and you may find a dip here and then thirty or forty feet away find another exposure, and fifty feet away another one, and a hundred feet away another one, and they may all be manifestations of the same

thing; and I regarded those seepages there, so far as any indication of the presence of petroleum was concerned, as all one thing. I did not observe any seepages of that kind elsewhere on that trip in the Elk Hills.

Even if I had not seen that seepage my opinion would have been, owing to the formation of the Elk Hills, that they were suitable for the accumulation of oil, but that would not necessarily mean that they had accumulated oil. That could be determined only by exploration. I suppose there are promising formations giving indications of adequate reservoir space for the accumulation of oil, that do not produce oil in paying quantities. I should say such things do occur.

I can illustrate such occurrences perhaps best by referring to a place in Pennsylvania where the anticlinal folds sometimes run for a long distance. Those folds in the rocks have this peculiarity; that they will wrinkle or arch, when the rock will rise until it comes to a certain height, and then plunge down and go down into a sort of a saddle, and come up again, and that sort of a thing may be traced across the country sometimes for maybe fifty miles or more. Now, in a region where the oil is distilled or let into a porous rock underneath a structure of that kind, you can see that the tendency is for the oil to be trapped underneath these big domes. Suppose you had an oil company and the geologist looked at that whole anticline. The geologist would naturally say "Look for your petroleum along where these domes are." But, at the same time, that whole arch there is practically an inverted arch or trough under which the petroleum accumulates. Now, there [759] is an end to the petroleum somewhere. It is not going to accumulate everywhere in that entire arch. So, you can bore holes right along the crest of the anticline and in some places get great quantities of petroleum and in other places you won't get any at all, because the water crowds the petroleum up underneath there.

There might have been an anticline broken across and so dislocated that the petroleum might have floated right out and it might have come out to the surface, especially on the side that is uplifted, so that it would be floated out to the surface and lost. There are sometimes processes going on in the oil beds where the oil is deposited, which would make it unprofitable to get out the oil. The case that I have in mind as illustrating it, is in the vicinity of the city of Santa Cruz, in this state. There is a great bed there of asphaltum, that is worked for the asphaltum, and it seems that the bed is simply a deposit of asphaltum that has oxidized so that it is no longer in the shape of petroleum—you can't pump it out, or it won't flow out; it is too thick.—

If the oil-yielding rocks did not underly or were not close to the anticlines, I should not expect oil under them. I should naturally expect that the amount of shale from which the oil is derived will have a bearing upon its productivity. The impervious strata between the oil-producing shale and the sand beds or reservoir would also have an effect upon the

productivity. It would have a tendency to shift the localization of it. That very likely accounts for the discovery of oil in large quantities in one place and the failure to obtain it in other places within a short distance. It is necessary for the favorable accumulation and profitable development of oil that the sand beds be of some considerable thickness and extent. It would be hard to say just how thick those beds ought to be; and these porous beds in a gently folded region covering and gathering its oil over a large area might yield just as much oil as a thicker porous bed gathering oil [760] over a small area.

I do not think there is any way to determine from an examination of the surface how large an area yields oil at any particular point. It sometimes happens that the sand beds become hardened so that they cease to be media through which oil can pass, and it occasionally or even frequently happens that the sand beds pinch out between hard layers of strata. is one of the reasons that one well is not a complete test of the character of any given territory, and as to other reasons therefor, I will say it depends on the localization of the oil. For instance, if you take the crest of an anticline-suppose we know where it is, and the well is put-and the rocks, we will say, dip towards the north at a pretty steep angle, and the well is put down, a thousand or two thousand feet to the north of that anticline, to a given depth and it gets no oil, that should not be considered as settling the question as to whether petroleum occurred in that anticline or not, because the well, at the same depth, might reach a petroleum-bearing bed if they went to the right place. You see, the beds dipping toward the north, your petroleum-bearing horizon comes near the surface at the axis of the anticline, and then, as you go away toward the north, on a flat surface, we will suppose, and put down your well, you see the depth of your well will have to be enormously greater there than it would have to be at the anticline.

I do not think that the presence or absence of water in the strata carrying oil could be regarded as decisively having a bearing upon where you would find the oil—certainly not in the light of what I understand to be the well-known fact in regard to the occurrence of petroleum in the San Joaquin Valley today. It used to be considered that if a well were put down and struck water there was no use looking for petroleum there; but I understand that the water has been shut out, in a number of instances, and the well has gone on deeper and found the petroleum below the water horizon. [761]

It is my general impression that the view I have first mentioned generally prevailed in the California oil fields until a few years ago.

Other things permitting, water would force the oil into the anticline to where there is a large accumulation of gas developed at the crest of the anticline. The oil would stay on top of the water and the presence of water would have considerable bearing upon whether you would find oil in the anticline or not. These conditions can not be determined from a surface examination.

It is not possible from a surface examination such as I made of the Elk Hills, to determine the depth of the oil sands. There are only two ways in which that can be determined. One would be to work out the geology with great care and detail over the region—not only in the Elk Hills themselves, but in the surrounding country—to find in what horizon the oil accumulates, and then by fitting one's evidence together and studying it one might come to the conclusion in regard to the depth at which the well would reach the oil-bearing bed. The only other way would simply be to put a well down and test it.

I have not made sufficient examination with that question in mind, to be able to tell whether you could ascertain the depth without a well, in the Elk Hills. I made no attempt to do so. The purpose of my examination was to ascertain, generally, whether that could be considered as possible oil territory, and I made no attempt to determine whether it was paying oil territory.

The general geology of the Elk Hills would lead me to infer that Monterey shale was under there and in great thickness.

As to whether or not the formation which has been termed the "McKittrick" formation conforms exactly or not to the underlying formation, I do not know. In order to answer that question very precisely it would be necessary for me to study the geology more in detail than I have studied it there. [762]

It is quite possible that the underlying formations in the Elk Hills had been very extensively folded or faulted or eroded before the deposit of the McKittrick formation. That could be determined only by extensive exploration. It would require a section through there, obtained by boring or in some other way, in order to determine that. Of course, one could work out the geology of the diatomaceous beds around there and find out whether the axes or folds run under this McKittrick formation, and they might be able to make it out fairly well. Whether that is true or not, I would not undertake to say at present.

I think it very likely that the reason why petroleum was called "coal oil" is found in the fact that it was originally supposed that petroleum was derived from coal.

Ralph Arnold did more work for the United States Geological Survey than any other man in connection with the oil geology in California. He has the reputation, deservedly, of being an able geologist, and to my knowledge, has devoted a great deal of time and study to the oil geology of California. As to the other geologists who were former students of mine, I expect that Robert Anderson has, next to Mr. Arnold, devoted a greater amount of time to the scientific study of the oil formations in California. He was Mr. Arnold's assistant for some years, and after Mr. Arnold resigned from the United States Survey, Mr. Anderson was put in charge of the petroleum work in California by the Survey.

It is not ordinarily possible for a geologist, or practical oil man, to determine from the existence of an oil bed at a particular point, that the bed continues for any particular or definite distance in all directions or any direction, partly because the oil comes to an end where it rests on the water; partly because the porous beds are not infrequently more or less lenticular in form; that is, they may pinch out and come to an end of themselves in that way, by thinning down, or they may be interrupted by [763] breaks, what we call faults or displacements of beds, so that the beds may be chopped square off.

REDIRECT EXAMINATION OF JOHN CASPAR BRANNER.

By saying that the Monterey shales in the lower part of San Joaquin Valley are quite thick, I mean that those shales were laid down in the bottom of the sea in approximately horizontal beds, and those beds can be seen where the rocks are openly exposed in cuts, as they are in some places around here, where you can see them like one board lying on top of another, and the thickness through, measured right straight through those beds as though you were measuring through the thickness of a book, amounts, in that region, to something like five thousand feet.

The Elk Hills are situated right about in front of the thick portions of these Monterey shales. The thickest parts, beginning up here some way north of McKittrick, come—oh, perhaps twenty miles or more, or so, northwest of McKittrick, and from there down to the vicinity of Maricopa, is the very area in which those shales have those great thicknesses, and these Buena Vista Hills and the Elk Hills lie right off towards the east, northeast, of those hills.

I would not expect the shales under the Elk Hills to be so faulted as to influence the disadvantageous accumulation of oil there. In fact, I anticipate that if I could take off the oil-bearing beds, the whole series—strip them, right away, down until we came to the Monterey shales—that I might find those shales more or less folded and ending up right against the old ground surface on which these later and oil-bearing beds have been laid down; but, so far as structural relations are concerned, I should consider that a sort of thing rather favorable than unfavorable to the accumulation of oil in the overlying beds.

From my examination and knowledge of the neighboring [764] regions, I have no reason whatever to believe that the oil-bearing sands in the Elk Hills are thin, hard or pinched out. That is a general conclusion. It is a generally recognized fact in regard to any sediment laid down in the water, especially if they are coarse.

I am familiar with the methods of quartz and gold mining and with petroleum mining, and should consider that, so far as the metal mine was concerned, the finding of traces of gold or silver on the surface of a ledge or lode did not amount to anything more than the merest suggestion, whereas in the case of the Elk Hills, I consider that the evidence is worth going ahead without any other evidences than the geology itself and disregarding any drilling or actual development in the hills themselves by man, and that evidence existed as early as 1900.

In coal mining one can get a very close idea of the tonnage to be taken out under a given tract of land; that is, we can calculate the product. It is the rule, in fact, in the anthracite regions in Pennsylvania, that the company will have in its reports by its geologist "We have so many acres of land. This land yields so many tons an acre", and they count on that just exactly as if it were money in the bank. Now, in petroleum mining, of course you can't do that exact thing; there is an element of uncertainty about it that you don't find in coal mining.

There is no such uncertainty in petroleum mining as there is in quartz mining. I should say that next to coal mining, the mining of petroleum, based solely upon geologic evidences, was the surest kind of mining that I know anything about.

I had not heard of any experience which indicated that the theory that the presence of water meant no oil existed in 1904. If I had heard it, I have forgotten it.

I should expect to find certain parts of the folds in Elk Hills more productive than others; but it would be a pretty [765] nice question to say just where the petroleum is going to come to an end. I don't think anybody could tell.

It seems to me that the best chances for oil in the whole country in that region were in the Elk Hills and the Buena Vista Hills. In forming that opinion I took into consideration the possibilities of the non-occurrence of oil resulting from the conditions of the sand and the pinching and hardness of the stratum,

and other interruptions; I think that any reasonable geologist knows that there is a certain amount of risk in any kind of petroleum mining. He counts on that.

I should say, decidedly, that the conditions in the Elk Hills are such as to warrant the ordinarily prudent man in the investment and expenditure of money with a reasonable expectation of developing a paying oil property. But I should like to explain this, that if we went back to the conditions as they existed there before any wells were put down in either of those hills and if I had been the consulting geologist for some company or party who anticipated putting down wells there, I should have put it to him in this way: "In my opinion the geology, altogether, of the mountains to the west, and the floor of the valley, and everything taken together, strongly suggest that these hills are the best place in which to put down oil wells. There ought to be, so far as we can see, enormous quantities of petroleum under those two group of hills. Now, there is nothing absolutely certain about putting down an oil well in a new region; there is a certain amount of risk about it and you can't get away from that risk." And I should have said to those men: "If you have got money to risk and you can afford to lose it, put it in there; if you can't afford to take any risks, you had better let somebody else do it."

I mean that anyone who had money to risk and who might afford to lose it might get larger returns for his money than he would from an ordinary investment. Perhaps I ought to say that [766] one of the

reasons for that risk lies in the fact that there is no way, short of putting a well down there, to determine the thickness of the strata that overlie the oil-bearing bed. As everyone knows, who knows anything about petroleum wells, you may have an enormous volume of petroleum so deep that you can't get it, and I should have said that may be the possibility there. Of course, the developments there have shown that the oil is there and the question now, of course, is entirely different from what it would have been before those wells were put down.

It is my belief that there is an enormous petroleum deposit in those hills but I have made no attempt to work out the details as to the depth and am not prepared to state whether it would be twenty-five hundred or five thousand feet.

RE-CROSS EXAMINATION OF JOHN CASPAR BRANNER.

I did not mean to say that I could tell whether the oil-bearing beds under the Elks Hills were folded, faulted even, or what condition they were in; that I could not determine. It might possibly be folded and overturned.

I don't know when I first heard of the change of view in reference to water being found in oil wells; it was comparatively recent; certainly within three or four years, but I would not say exactly. Prior to that time water in a well had been regarded as an almost fatal condition.

RE-DIRECT EXAMINATION OF JOHN CASPAR BRANNER.

I should have said that I did not know whether water, under the conditions mentioned above, would be fatal or not, because my observation in regard to water led me to believe that it could be separated from oil horizons and that it was separated from them; but the well-drillers all protested so, that, as far as my experience went, when they got to water they gave it up as no use. [767]

In reaching my conclusion from observations in 1912, from the geological evidences alone, that the Elk Hills was an enormous oil-bearing zone, I did not take the possible existence of water there, into consideration. I did not consider that it bore upon the question one way or the other. As a geologist, I would say that I would be disposed to pass the question of the interference of water along to the mechanical engineers who had charge of the boring, and should tell them to take care of the water and shut it off and go along with their boring and pay no attention to that.

RE-CROSS EXAMINATION OF JOHN CASPAR BRANNER.

I do not mean to be understood as saying that I actually determined that that territory did contain an immense quantity of oil. I meant to say that if I had gone over that ground in 1900 with a view to saying whether or not those were probably petroleum lands, I should have, under those circumstances,

pronounced them oil lands and recommended their exploitation to anyone who was able to take the risk. I realized that the risk might result in a total loss of the investment.

REDIRECT EXAMINATION OF JOHN CASPAR BRANNER.

After I went there two years ago and after I went there two or three months ago, after seeing the general geology of those two groups of hills, I concluded that they were both favorable for large accumulations of oil. [768]

GEORGE A. STONE, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION.

I am 63 years old and first went into the employment of the Southern Pacific Company in 1865, as flagman on the Central Pacific survey.

/ From 1897 to the latter part of 1907 I was employed in the land department of the Southern Pacific Railroad Company and am now a pensioner.

While employed in the land department I knew Mr. Eberlein, who was acting land agent. I was his clerical assistant and as such had something to do with the preparation of lists of lands which were claimed by the Southern Pacific Railroad Company under its grant. I supervised the preparation under Mr. Eberlein's direction.

I am acquainted with selection list No. 89 of the main line grant and had to do with its preparation.

It was prepared in 1903, probably in September or October.

I am acquainted with the Township just east of McKittrick but don't remember its number just now. It is probably 30-23. The odd numbered sections from 15 down to 35, excepting section 31, are embraced in that list.

That list was prepared under Mr. Eberlein's direction. The lands mentioned were placed in that list at the suggestion of Mr. E. T. Dumble, I think. Mr. Dumble was consulting geologist of the Southern Pacific Company at that time.

I do not know that Mr. Dumble had examined the lands. I never knew what his duties were. I made no examination of the lands in suit, myself, for the purposes of selecting them. Such knowledge as I had of the lands was general in character from my general knowledge of the country. I had been, frequently, in the country for two years preceding. [769]

I was discharged from the services of the company and was not reinstated. Mr. Eberlein directed me to go to the field to examine certain lands and I felt that my health was not equal to the task and declined the work, and, on account of that, as we could not agree, he said: "Well, your services will terminate, then, on the 31st of December, 1907", and my services ceased then.

I naturally felt some bitterness about being let out and probably called the matter to the attention of some officer of the company; I do not recollect that. I regarded the selection of these lands as irregular. Mr. Dumble, as the geologist, I thought pressed the selection for reasons best known to himself. I supposed, as geologist, he thought they were oil lands. He pressed the selection of this land probably within thirty days prior to the list in 1903, not earlier than September or later than November.

The list filed in the Visalia Land Office contained the lands in suit. I don't think it contained other lands. As I remember, the list was incorrect in some way when filed, and later some different bases had to be substituted for a portion of the lands selected. I am not sure of that. It is my recollection that there was a rearranged list. I think Mr. William Wicks, a clerk in the office, wrote the description to the land in the list No. 89 referred to, which has just been handed to me.

After I was subpoenaed as a witness in this case I went, of my own accord, and informed Mr. Singer of that fact, and this morning, of my own accord, I told Mr. Lewers, attorney for the company, that the list was made up at the suggestion of Professor Dumble.

I am a pensioner of the Southern Pacific Company. At the time the selection was made I was on the pay roll of the Southern Pacific Railroad Company. Mr. Dumble's name did not appear on [770] the land department roll of the Southern Pacific Railroad Company.

I had authority to sign Mr. Eberlein's name to correspondence but not to selection lists. I had charge

of the office, generally, in his absence for the purpose of correspondence and some of the routine business.

CROSS EXAMINATION OF GEORGE A. STONE.

I wrote to Mr. Kruttschnitt about my discharge as I thought I had been unjustly treated, and I had every reason to. I still feel the same way about it.

I do not think I said anything to him about what I considered to be an irregularity and I don't remember complaining about that to any of the officers of the company. I was friendly with them after my discharge.

REDIRECT EXAMINATION OF GEORGE A. STONE.

I have no recollection of stating in my letter to Mr. Kruttschnitt that I would lay before the Department of Justice and give to the press what I considered an irregularity in the selection, unless I was reinstated. I probably threatened at one time to do so.

I have a faint recollection of the Confidence Oil Lease but don't remember the leases by name now. I remember the Zier Oil Company, which, I think, had a lease with the Southern Pacific Railroad Company and there are a number of other instances where the railroad company had leased certain of its oil lands to individuals.

I think there was a man named Josiah Owen in Mr. Dumble's department. I remember, sometime the latter part of the time I was in office, seeing him.

I think Mr. Dumble had charge of the leases and reports were sent to the Land Department as to the amount of oil removed [771] at the time when different wells were in operation under these leases, and various other matters connected with the leases through his office. They were written reports, I think.

RE-CROSS EXAMINATION OF GEORGE A. STONE.

Until Mr. Mills called my attention to this letter to Mr. Kruttschnitt, or seemed to think I had written one, I had forgotten about any letter to him. I am not sure that I made a threat to Mr. Kruttschnitt or other officers of the Company, that I would complain to the Government about this matter. I was mad and likely, in my anger, went further than I would have if I had not been angry. I was anxious to make my case appear as strong as I could. [772]

On Wednesday, May 15, 1912, at 2 o'clock p.m., the further taking of testimony herein was resumed pursuant to the adjournment: Willis N. Mills, Special Assistant Attorney-General and A. I. McCormick, United States Attorney, appearing on behalf of the plaintiff, and Charles R. Lewers, Esq., appearing on behalf of the defendants.

Mr. Mills—Please swear Mr. Eberlein.

Whereupon, CHARLES W. EBERLEIN was called on behalf of the plaintiff and duly cautioned and solemnly sworn to testify the truth, the whole truth and nothing but the truth.

Mr. Mills: Mr. Eberlein, will you produce the

data, memoranda, which you were commanded to produce in response to the subpoena?

Mr. Eberlein: There it is. (Pointing.) By Mr. Mills:

- Q. Mr. Eberlein, for the purposes of this record I will ask you your full name, and your present place of abode?
- A. Charles Wood Eberlein. My present postoffice address is Callahan, Siskiyou county, California.
- Q. Were you at any time in the employment of the defendant Southern Pacific Railroad Company.
 - A. Railroad Company?
 - Q. Yes sir.
 - A. Yes sir.
 - Q. During what years, Mr. Eberlein?
 - A. From 1903 until 1908.

Mr. Mills: At this time, Mr. Lewers and Mr. Shoup, I want to ask you, with reference to certain exhibits I want to offer in this case which have evidently passed through the fire and are in [773] a carbonized state and are actually falling to pieces because of the frailty of the exhibits, whether you will object to stipulating, after examination by you, that we can withdraw them and substitute certified or compared copies?

Mr. Lewers: Well, when we see them we can tell. Mr. Mills: In order to preserve them. You will have no objection to that, will you, after you have examined them? Mr. Lewers: I can't tell until I see what they are. We may want them in the record.

Q. By Mr. Mills: I show you, Mr. Eberlein, what purports to be a certified copy of a resolution of the board of directors of the Southern Pacific Railroad Company, dated September 2, 1903, signed by Mr. Willcutt as the secretary of that company. Will you state what it is.

A. Well, that is apparently the resolution of the board of directors of that date appointing me as acting and agent of the company. That is my handwriting on the back. I have not seen this document for years. I had forgotten all about it.

Mr. Mills: We offer this in evidence.

Mr. Lewers: We object to the introduction of this document on the ground that no sufficient foundation has been laid, in that the origin and custody of this document has not been accounted for, and for all that appears from the evidence already introduced this may not be a genuine document.

Mr. Mills: In response to that we will say that before we finish the testimony in chief we will show in whose custody it has been.

The certified copy of the resolution last referred to and offered in evidence is marked "Plaintiff's Exhibit DD-L. L."

Q. Are you acquainted with the handwriting of Mr. J. H. Willcutt, secretary of the Southern Pacific Railroad Company?

A. I am acquainted with his signature. [774]

Q. Yes. I mean his signature.

A. Yes.

Q. Will you state whether that is his signature on Government's Exhibit DD?

A. Yes, sir; I believe it is.

Q. Will you refer to the seal on the document and state whether or not that is the seal of the corporation whose board of directors purports to have issued that resolution?

A. That is the Southern Pacific Railroad Company's seal.

Mr. Mills: Do you deny, gentlemen, Mr. Lewers and Mr. Shoup, that that is the signature of Mr. Willcutt or that that is the seal of the Southern Pacific Railroad Company?

Mr. Lewers: I would prefer you would prove your case in your own way.

Q. By. Mr. Mills: I show you this paper, Mr. Eberlein, and ask you whether you have ever had that copy prepared—it seems to have been dated in April, 1904,—from any other paper?

A. This must be a copy of the resolution. That is my handwriting on the back.

Q. I refer to this second page, which is not on that paper. Was that prepared from any paper saved from the conflagration of 1906, do you know?

A. I couldn't say. I have not seen that. I have not seen that paper.

Q. Now, Mr. Eberlein, will you state the circumstances connected with your appointment as acting land agent of the Southern Pacific Railroad Company, in full?

A. More than just the actual fact of appointment?

Q. Yes. That is, who directed the appointment, if anyone, and how it came about?

A. The appointment, as I remember, was made at the request of Mr. Kruttschnitt. [775]

Q. Will you give his full name, please?

A. Julius, I think it is.

Q. Yes. And what office did he hold at that time?

A. He was vice-president and general manager of the Southern Pacific Company.

Q. Had you had any talk with Mr. E. H. Harriman, prior to that time, about being appointed to the position?

Mr. Lewers: To which we object, on the ground that it is calling for purely hearsay testimony, and that a corporation cannot be bound by the exparte and unofficial statements of any of its officers.

A. I had a talk with Mr. Harriman before I came west. I came west at his instance, but not to be acting land agent or to have any official connection with the roads.

Q. By Mr. Mills: Prior to your appointment as acting land agent had you been connected in any way with any other railroad excepting the—

A. The Union Pacific.

Q. Yes. And in what capacity had you gone into that company, Mr. Eberlein?

A. Well, as the representative of the vice-presi-

dent of the road in reorganizing the land affairs of the Union Pacific.

- Q. Will you state the circumstances of how you came to be suggested to the board of directors of the Southern Pacific Railroad Company as acting land agent?
- A. I came to San Francisco in June, I think, 1903, to take up the matter of the consolidation and reorganization of three land grants, and it was while engaged in that work that Mr. Kruttschnitt called for me and told me that it was very desirable to make some changes in the management of the Southern Pacific Railroad Company land department. He wished to retire Mr. Jerome Madden, who was then the land agent, and he wished me to agree to [776] take that place temporarily. To which I objected strenuously, as interfering with the other work that I was sent there to do and which I had on hand. I protested to the New York office against it.
- Q. By "New York Office" what do you mean? What office?
- A. To the office of the Harriman lines, the Southern Pacific Company, in New York. But Mr. Kruttschnitt asked me as a personal favor to accept that, and he thought in six months he could find somebody. And that is how I came to be appointed.
- Q. You entered upon the discharge of 'your duties upon what date, as acting land agent?
- A. I believe the 3rd of August, 1903. I believe it was August. I would not be sure. I have nothing to show.

Mr. Mills: In order to get a statement into the record of the duties of the acting land agent, I will read into the record, so far as I am able to, from this Exhibit DD, as follows:

SOUTHERN PACIFIC RAILROAD COMPANY RESOLUTION ADOPTED BY BOARD OF DI-RECTORS—SEPTEMBER 2, 1903.

RESOLVED AND ORDERED THAT C. W. hereby is appointed Act-FBERLEIN be and he ing Land Agent of this Company, with full power to supervise and attend to all matters pertaining to he Stat is granted by the United States to this company, or its predecessor, the SOUTHERN PACIFIC RAILROAD COMPANY. including the lands granted by the United States Government to the TEXAS AND PACIFIC RAIL-WAY COMPANY, and assigned and transferred by said Texas and Pacific Railway Company to the Southern Pacific Railroad Company, prededecessor of this company, and said C. W. Eberlein as such Acting Land Agent, is hereby given full power to manage, conduct and carry on the business of the Land Office of this company and subject to the approval of the President or any Vice-President of this Company, to sell, contract 11, demise and let all or any of its said [777] lands and to sign his name for this Company to all contracts, agreements, leases and other documents as shall be necessary and requisite for the full, complete, effectual and proper management or disposal of its lands.

And he is hereby fully authorized and empowered to represent this Company in the United States Land Offices or before the officers thereof in person or through persons employed by him for that purpose, and to represent this company in all matters pertaining to its lands at all times and places.

RESOLVED, further, that all acts heretofore done by the said C. W. Eberlein, as Acting Land Agent of Company, within the purview of the foregoing resolution, be and the same hereby are approved, ratified and confirmed.

I, J. L. Willcutt, Secretary of the Southern Pacific Railroad Company, hereby certify the foregoing to be a full, true and correct copy of a resolution adopted at a regular meeting of the Board of said Company, held this day.

WITNESS my hand and the corporate seal of said Company, this second day of September, 1903.

J. L. Willcutt,

Secretary.

(Seal: SOUTHERN PACIFIC RAILROAD COMPANY.)

(Endorsed:)

Resolution

Board of Directors Southern Pacific R. R. Co. Sept. 2, 1903, Appointing and Defining duties of C. W. Eberlein Acting Land Agent S. P. R. R. Co.

Q. Now, in the discharge of your duties as acting land agent, will you state generally, Mr. Eberlein, what functions you had as acting land agent?

A. Full charge and control of all the granted lands of the company.

Q. That included, did it not, the lands in the vicinity of [778] the lands in this suit which had then been patented in the McKittrick, Sunset and Coalinga fields?

A. Everything in the grant lands; such lands in those fields as were granted lands of the Southern Pacific Railroad Company.

Q. Do you know Mr. George A. Stone?

A. Yes.

Q. The witness who testified here this morning?

A. Yes sir.

Q. Who and what was Mr. George A. Stone during the time he was connected with the Southern Pacific Railroad Company while you were acting land agent?

A. He was my assistant almost the entire time I was acting land agent.

Q. And as assistant to you did he hold the title of assistant acting land agent?

A. Assistant to the acting land agent.

Q. What was the nature of his duties as such officer?

A. Well, he represented me in my absence, ran the office, ran the department.

Q. In doing that what powers did he have?

A. He had all the powers necessary to run that department during my absence, with the exception only of signing deeds or doing such other acts as were limited to the acting land agent by the board of directors. He did not sign the selection lists; I signed those in person, because I believe that is required by the government. But he did everything else, in the way of signing vouchers, approving payrolls. He signed leases for me.

Q. Do you mean to say that money passed by the company to other parties on his approval?

A. Yes sir. It was necessary that he should have pretty full power, because I was absent in New York sometimes three months at a time. [779]

Q. Now, during that time did he have officially any power to sign correspondence relative to matters pertaining to that office?

A. Oh, yes. He dictated letters on his own initiative—had to in order to carry on the business of the department.

Q. Then, in fine, I understand you to say that he exercised all the functions and duties which you as acting land agent were empowered to do, excepting those which were especially limited to you personally?

A. Yes sir.

Q. Is that correct?

A. Yes sir.

Q. How long was Mr. Stone employed in that capacity, to your knowledge?

A. He was in the department when I took hold of it, as the land examiner, the field agent of the department; and after I came there he never went into the field again as a field agent. He became my acting—

he became assistant to the acting land agent, I think in the same month that I was appointed.

- Q. Was his appointment by you?
- A. Yes.
- Q. Was that appointment in any way required to be submitted to anyone else for approval?
- A. Well, it may not have been required, but I did submit it.
 - Q. And to whom?
 - A. To Mr. Kruttschnitt.
 - Q. Who at that time was what officer?
- A. He was the vice-president and general manager.
 - Q. Of what company?
 - A. Of the Southern Pacific Company.
 - Q. You mean the Kentucky corporation? [780]
 - A. Yes sir.
 - Q. And defendant in this suit?
 - A. I don't know who the defendant in this suit is.
- Q. Well, that company is a defendant in this suit, the Kentucky corporation.
 - A. Well.
- Q. Were you acquainted with a man by the name of Josiah Owen at any time while you were in the land department of that company?
- A. I think I knew Mr. Owen to speak to. I never had any business with him.
- Q. Well, did you ever meet a man by the name of Dumble?
 - A. Oh, yes; I knew Professor Dumble well.

- Q. Now, was Mr. Owen, to your knowledge, in any way connected with the office of Mr. Dumble?
- A. So I always understood—that he was an assistant.
 - Q. And in what department was Mr. Dumble?
- A. Why, he was in a class by himself, I think—he was the geologist.
 - Q. He was the geologist of what company?
- A. Well, I don't know that I can answer that. I have always supposed of the Southern Pacific Company.
- Q. Well, as geologist of the Southern Pacific Company did he have anything to do with lands of the Southern Pacific Railroad Company?
 - A. No sir.
 - Q. That is, officially, you say?
 - A. No sir; he had none that I know of.
- Q. But he did attempt, did he not, to have something to do with the lands of the Southern Pacific Railroad Company?
 - A. Oh, he "butted in" frequently.
- Q. Now, I show you this paper, Mr. Eberlein. Will you [781] please examine it and tell me where the original is, if you know, or what became of it? What is that paper?
- A. That is a copy of a letter that was written to me by C. H. Markham, 2nd of August, 1904. It is a copy of a badly carbonized letter that came out from the ruins of our vault and was copied.
- Q. Do you know what was done with the original after this copy was made?

A. Oh, it was utterly destroyed in the transcription of it. It was badly carbonized. There was a file there that referred to this certain matter, and it was very badly damaged and under my order it was copied—everything that could be copied out of it—and compared as carefully as could be.

Q. I notice on this paper the names "Compared by H. K. and L. A." What do those initials refer to?

A. The "H. K." is Herman Koch, and "L. A." refers to Lottie Abrams. They were two clerks in the department who attended to the comparing of all that correspondence that was transcribed from the carbonized papers and documents.

Q. Was this copy made under your direction and supervision?

A. Yes sir.

Mr. Mills-I offer this in evidence.

Mr. Lewers—Object to the introduction of this, on the ground that no sufficient foundation has been laid, in that it appears from the testimony introduced that the witness did not himself copy this and it was not compared by him; and we object on the further ground that it is irrelevant to any issue in this case, and also that the signature of the original has not been identified.

Q. By Mr. Mills—This appears to pertain to a proposed lease [782] between the Southern Pacific Railroad Company and the Kern Trading and Oil Company, dated August 2, 1904. Will you kindly read it again Mr. Eberlein, to yourself, and state

whether it is a true copy of the original which you say was destroyed?

Mr. Lewers—We object to that question, on the ground that it already appears that the witness has not compared it himself, and there has been no identification of the original instrument.

A. I believe it is.

Mr. Mills-I will read this into the record:

COPY

"Southern Pacific Company San Francisco, Cal., August 2nd, 1904.

Mr. Chas. W. Eberlein,

Acting Land Agent, S. P. R. R. Co., City.

Dear Sir:—Enclosed is ten year lease dated August 2nd, 1904, to be entered into between the Southern Pacific Railroad Company and the Kern Trading & Oil Company.

You will note that I have signed this as President of the Kern Trading & Oil Company and would ask that you sign it as Acting Land Agent of the Southern Pacific Railroad Company, returning the lease to me when this shall have been done, in order that I may have it attested by Secretary Willcutt for both Companies.

Yours truly,

(Signed) C. H. Markham.

GLK SCT

GLK

Enclosure:

Compared By: H. K.

 \mathbf{L}

A"

Mr. Mills—Mark that government's Exhibit EE. [783]

The letter last referred to and offered in evidence is marked "Plaintiff's Exhibit EE-L. L."

Q. I show you this paper, Mr. Eberlein. Will you state what that is?

A. It is a copy of a telegram, dated August 4, 1904, sent to me at Denver, from Mr. George A. Stone.

Q. How was that copy prepared?

A. It was prepared the same as the other.

Q. The same as the last exhibit?

A. From destroyed stuff that was very fragile—could not stand any wear at all—and it was copied to preserve what was in them.

Q. Is that original destroyed?

A. Yes sir.

Q. Was this telegram which I now have in hand and the previous exhibit marked government's Exhibit EE, before the fire preserved in any file in the usual course of business pertaining to the matters to which they referred?

A. That was a private file.

Mr. Mills-We offer this in evidence.

Mr. Lewers-We make the same objection.

Mr. Mills—I will read this into the record; and ask that it be marked Plaintiff's Exhibit FF.

COPY

"TELEGRAM

San Francisco, Cal., August 4th, '04. Charles W. Eberlein,

care, C. E. Wantland, General Sales Agent, Union

Pacific R. R.

1025-17th Street, Denver, Colorado.

Received yesterday from Mr. Markham lease to Kern Trading and [784] Oil Company for your signature.

Geo. A. Stone.

Compared By: H. K.

L A"

Q. Will you please examine this paper, Mr. Eberlein, and state what that is?

A. That is a telegram from me, dated August 4th, 1904, to George A. Stone.

Q. That is a copy of the telegram, is it?

A. That is a copy of the original.

Q. What became of the original telegram?

A. It was destroyed as a result of the fire.

Q. And is this, the same as the other copies which have been introduced, an exact copy?

A. Exactly the same; compared copy, and belonged to the same file.

Q. Does this paper which I hold in my hand refer in any way to the telegram sent you by George A. Stone and marked Exhibit FF?

Mr. Lewers—I submit the paper itself is the best evidence.

A. It is an answer to it.

Mr. Mills—We offer this in evidence, and ask it to be marked Plaintiff's Exhibit GG.

Mr. Lewers-The same objection.

Mr. Mills-I will read this into the record:

COPY

"TELEGRAM

Denver, Aug. 4th, '04.

Geo. Stone, [785]

Dept. S. P.

S. F.

Hold Kern Trading and Oil Company lease for execution until my return carry out orders I have given no lands for sale at present and no oil lands for sale at any price do as told without reference to me. Leave for Omaha to-morrow afternoon Omaha Saturday.

CHAS. W. EBERLEIN.

Compared By: H. K.

L

A"

Q. I show you this paper, Mr. Eberlein, which purports to be a copy of some original. What is that paper?

That is a copy of a letter addressed by George A. Stone, assistant to acting land agent, to C. H. Markham, vice-president and general manager of the Southern Pacific Company, dated August 4th, 1904.

Q. What became of the original of this letter?

A. It was destroyed just as the others were. The same file.

Q. The same statement made applies to this letter as applied to the others?

A. Applies to this; everything in this file.

Mr. Mills—We offer this in evidence and ask it to be marked Plaintiff's Exhibit HH. Mr. Lewers-The same objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit HH-L. L."

Mr. Mills—I will read this into evidence. [786]

COPY

"Dictated

S

August, 5th, 1904.

Mr. C. H. Markham,

Vice-President and General Manager,

Southern Pacific Company, San Francisco, California.

Dear Sir:

Your favor of the 2nd instant, addressed to Mr. Charles W. Eberlein, Acting Land Agent, inclosing ten year lease, dated August 2nd, 1904, between the Southern Pacific Railroad Company and the Kern Trading and Oil Company, with request that Mr. Eberlein sign it as Acting Land Agent and return it to you, was received after his departure on a short trip to Denver.

I have called it to his attention, and he has advised me that he will take up the matter immediately upon his return.

Yours very truly,

GEO. A. STONE.

Asst. to Acting Land Agent.

RSG.

Compared By: H. K.

 \mathbf{L}

A''

Q. Mr. Eberlein, I show you this paper. Will you state what that is?

A. That is a copy of a letter from Mr. C. H. Markham to me, dated September 5th, 1904.

Q. What became of the original of this letter?

A. Destroyed the same as all the rest of the letters in that file.

Q. And your statement with reference to this letter applies the same as to the other exhibits that I have offered?

A. Exactly. [787]

Q. That were taken from that file?

A. Yes sir.

Mr. Mills—We offer this in evidence, and ask that it be marked Plaintiff's Exhibit II.

Mr. Lewers-The same objection.

The copy of letter last above referred to and offered in evidence is marked "Plaintiff's Exhibit II—L. L."

Mr. Mills—I will read this into the record.

COPY

"Southern Pacific Company San Francisco, Cal., September 5, 1904.

Mr. Chas. W. Eberlein,

Acting Land Agent, San Francisco.

Dear Sir:

Referring to my letter of August 2nd on the subject of ten year lease between the Southern Pacific Company and the Kern Trading & Oil Company, and which was answered by your Mr. Stone, August 5th,

to effect that owing to your departure from the City matter would have to await your return, would ask when I may expect to receive deed in question.

Yours truly,
(Signed) C. H. Markham
GLK

BCE

Compared By: H. K.

L A"

Q. I show you this letter, Mr. Eberlein, and will ask you [788] what it is, what it refers to.

A. That is a letter from myself to W. D. Cornish, dated September 10, 1904. It is a copy of an original now destroyed, the same as all the rest in this file.

Q. Who was Mr. Cornish at that time?

Q. By Mr. Lewers—You say it was a copy of the original?

A. It is a copy of the original that was destroyed.

Q. By Mr. Mills—And is this the same as the others I have offered—true and correct copies of those originals which were destroyed?

A. As I believe and understand, it is a true and correct copy of the original.

Q. Who was Mr. Cornish?

A. He was vice-president of the Southern Pacific Company, resident in New York.

Mr. Mills—I offer this in evidence and ask that it be marked Plaintiff's Exhibit JJ.

Q. By Mr. Lewers—Is it a copy of an original or copy of a copy?

A. Copy of the original.

Q. And was the original returned from Mr. Cornish?

A. Oh, no; pardon me. That would have to be a copy of the file, of the carbon copy of the file. I will add that all those letters that are addressed by me, of course these are copies of carbon copies.

Q. By Mr. Mills—Yes. They were all contained in that file, were they not?

A. All in that file, kept together.

Mr. Lewers—We make the same objection, and the additional objection that the original is not accounted for. [789]

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit JJ-L. L."

Mr. Mills-I will read this into the record:

COPY

"Dictated

September 10. 1904.

Hon. W. D. Cornish,

Vice-President, Southern Pacific Company, 120 Broadway, New York.

Dear Sir:

For your information, I beg to hand you copy of letter of this date to Mr. Markham, setting forth objections to the lease Southern Pacific Railroad Company to the Kern Trading and Oil Company.

Yours very truly,

CHARLES W. EBERLEIN, Acting Land Agent. JRH

INC

Compared By: H. K.

L

Q. Who was J. R. H?

A. He was my stenographer, J. R. Hurdie.

Q. I show you this letter, Mr. Eberlein. State what that is.

A. That is a copy of a carbon copy of a letter I sent to C. H. Markham September 20, 1904.

Q. Is that a copy prepared in the same way you have mentioned as to these other letters?

A. The same way.

Q. And from that same file? [790]

A. The same file.

Q. And the original copy from which this was taken has been destroyed?

A. Yes sir.

Mr. Mills—We offer this letter in evidence and ask that it be marked Plaintiff's Exhibit KK.

Mr. Lewers—We make the same objection as we did to the last exhibit.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit KK-L. L."

Mr. Mills-I will read this exhibit into the record.

COPY

"Dictated

September 10, 1904.

Mr. C. H. Markham,

General Manager, Southern Pacific Company, San Francisco, Cal.

Dear Sir:

I have your letter of September 5th in regard to the lease Southern Pacific Railroad Company to the Kern Trading and Oil Company.

I have been over this matter with some thoroughness, and I beg to report that this instrument is not in condition for execution.

I wish to say, furthermore, that this department was not consulted in the making of this lease, or the mistakes made could have been avoided. I refer to the inclusion of lands not in the ownership of the Southern Pacific Railroad Company and entirely outside of its granted and indemnity limits, and never in its ownership so far as this department is advised. Other [791] lands, presumably oil lands, have been omitted.

What appears to be a mistake is the inclusion in this lease of the whole townsite of McKittrick.

I do not know on what ground such inclusion is made, but if it is intended to be included the description must be of the townsite and not of the government sub-division which has been duly platted.

There are several provisions of the lease itself which I think should be modified.

As it stands the lease provides for the payment of a royalty of one tenth of the gross product or 'onetenth part of the gross amount of moneys received from the sale of minerals, substances and products.' The obvious construction of this clause is a permission to some one, not specified, to sell the Company's royalty without limitation as to who may do so or the price to be received, etc.

That clause giving permission to the lessee to use our oil or dry asphaltum for fuel, etc., without payment of royalty thereon, is in conflict with that provision which gives to the Company one-tenth of the gross product.

In my opinion, the one-tenth royalty being a small royalty, at the present time at least, should not be subject to any deduction, and especially to a deduction of this kind which is indefinite.

That clause of the lease which provides for the payment of taxes, upon improvements only, is not, in my opinion, fair to the railroad company.

By reason of the improvements the assessment on the land is largely increased. The Company gets only one-tenth of the product and pays a large part of it in taxes upon an exceedingly high valuation. [792]

Taxation upon improvements amounts to but little. The improvements are not of an expensive character and are subject to deterioration from the time they are made.

In addition to this there is a very urgent reason for delaying the execution of these papers.

We have selected a large body of lands interspersed with the lands sought to be conveyed by this lease, and which we have represented as non-mineral in character.

Should the existence of this lease become known it would go a long way toward establishing the mineral character of the lands referred to, and which are still unpatented.

We could not successfully resist a mineral filing after we have practically established the mineral character of the land.

I would suggest delay at least until this matter of patent can be adjusted.

I call your attention to the fact that this lease conveys oil lands and also assigns the existing oil leases.

That being the case the management and control of oil matters will pass entirely from the Land De-

partment.

It seems a little singular that the Company should assign oil leases which provide for the payment of royalties running from one-fifth to one-eighth, and now being paid to the Company at that rate, and receive therefrom a decreased revenue without consideration, so far as disclosed by these papers.

If you desire a return of the file it will be sent to

you immediately.

As I am about to leave for Portland, to be gone for some time, I would suggest that this matter be kept in abeyance until such time as I can run over the lands carefully and be sure that the mistakes referred to have been corrected. [793]

Yours very truly, CHARLES W. EBERLEIN, Acting Land Agent. Compared By: H. K.

L

A"

Q. The initials "J. R. H.", Mr. Eberlein, refer to the stenographer you have mentioned?

A. Yes sir.

Q. And "H. K." and "L. A." are the same parties who compared all these papers?

A. Yes sir.

Q. I think at this time I may ask you this question: You say in this letter, as a reason for delaying the execution of the lease referred to, "We have selected a large body of lands interspersed with the lands sought to be conveyed by this lease and which we have represented as non-mineral in character." What lands did you refer to when you said that in this letter? Did you refer to lands east of McKittrick, in Township 30-23?

A. I will have to refer to those papers there before I can say.

Q. This is what purports to be a plat.

A. Generally the lands I referred to were those contained in the list that I had made in—selection list, in 1903, in August or September, 1903. Yes; those are the lands.

Q. What township and range?

A. In Township 30 South, Range 23 East, Mount Diablo.

Q. And what sections, please?

A. All of 15, part of 17, part of 19, all of 21, all of 23, all of 25, all of 27, all of 29, all of 33, all of 35.

- Q. In Township 30 South, Range 23 East? [794]
- A. 23 East.
- Q. I will read this extract from your letter: "Should the existence of this lease become known, it would go a long way toward establishing the mineral character of the lands referred to and which are still unpatented." Did you by that refer to the lands that you have just described?
 - A. Yes sir; I think I did.
 - Q. I show you this paper and ask you what it is.
- A. Letter of C. H. Markham to me, dated September 14, 1904. That is a copy of his letter which is now destroyed.
- Q. Was the original of that letter destroyed in the conflagration?
- A. The same time that all the rest of these letters were.
- Q. And the copy was made at the time it was in a bad state of carbonization?
 - A. Yes sir.
- Q. This is, as far as you know, a correct and compared copy?
 - A. I believe it is.
- Mr. Mills—We offer this letter in evidence and ask that it be marked "Plaintiff's Exhibit LL."

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit LI.—L. L."

- Q. Who was Mr. C. H. Markham? The same Mr. Markham referred to?
- A. The same man; vice-president and general manager of the Southern Pacific Company.

Q. The Kentucky corporation?

A. Yes sir. [795]

Mr. Mills-I will read this into the record:

"COPY—from Copy.
SOUTHERN PACIFIC COMPANY

San Francisco, Cal., Sept. 14, 1904.

Mr. C. W. Eberlein.

Acting Land Agent,

San Francisco.

Dear Sir:

Referring to your letter of Sept. 10 relative to status of our oil leases: I see no objection to going ahead with the original program of assigning to the Kern Trading & Oil Co. all oil leases now outstanding but I shall want you to continue your connection with the leases until such time as questions now under consideration shall have been disposed of.

I quite agree with you that as a condition precedent to the continuance of at least a majority of the defaulted leases, we should require that all undeveloped territory be surrendered to the Company, leaving only the tract actually being developed subject to the terms of the lease. As a further consideration, I believe we should require that the product be shipped over the Southern Pacific Co's lines. I have discussed this matter with Mr. Herrin, and while he is of the opinion that under the contracts the lessees are in default, and could be gotten rid of, he agrees with us, that as a matter of policy it ought not to be done. I think, therefore, if you will go ahead with the matter upon the general lines laid

down in the foregoing, it will be very much better than to attempt to take arbitrary action, more especially in cases where parties are able to develop if we force them into that position.

Yours truly, (Signed) C. H. Markham.

CHM FM

Compared By: H. K .- L

A." [796]

Q. I show you this paper, Mr. Eberlein, and will ask you what it is?

A. That is a copy of Mr. Markham's letter to me of September 21, 1904.

Q. What became of the original of this letter?

A. That was destroyed in the same way the rest of the file was.

Q. Was this compared and copied under your direction and supervision?

A. Yes sir.

Q. And is a correct and compared copy?

A. I believe so.

Mr. Mills—We offer this in evidence and ask that it be marked "Plaintiff's Exhibit MM."

Mr. Lewers—We make the same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit MM-L. L."

Mr. Mills-I will read this:

"COPY

SOUTHERN PACIFIC COMPANY

San Francisco, Cal., September 21, 1904.

Mr. C. W. Eberlein,

Acting Land Agent,

San Francisco, Cal.

Dear Sir:

Referring to your letter of September 10th on the subject of proposed lease from the Southern Pacific Railroad Company to the Kern Trading & Oil Company, would ask that you [797] kindly check this matter at an early date as possible and let me know promptly from your standpoint whether there is anything in the lease that is really objectionable, consulting with Mr. Dumble and the Law Department in order that the lease may be properly drawn.

Yours truly,

(SIGNED) C. H. Markham,

GLK BCE

G. L. K.

W. F. H.

E. T. D.

Compared By: H. K.

L

A."

Q. You are acquainted with the custom, in the matter of correspondence in your department and in the Southern Pacific Railroad Company, generally, are you not?

A. I believe so.

Q. Will you tell me what the initials "W. F. H." and "E. T. D." mean?

A. As I understand it, that means that a carbon copy of that letter was sent to both those gentlemen
 —William F. Herrin and E. T. Dumble.

Q. Who was Mr. W. F. Herrin at that time?

A. Chief counsel of the Southern Pacific Company.

Q. And Mr. E. T. Dumble is the Mr. Dumble, the geologist?

A. That is the same Dumble we are talking about here, consulting geologist.

Q. I show you this paper. Will you please state what that is?

A. That is a letter from me; that is a copy of the carbon copy of my letter to C. H. Markham, dated September 21, 1904.

Q. Was this copy made in the same way that these other [798] copies were made?

A. Exactly the same, and for the same reason.

Q. And was the copy from which this was taken in the file that you have referred to which was burned?

A. Yes sir. It was destroyed by reason of its decrepit condition after it came out of the fire.

Mr. Mills—I offer this letter in evidence and ask that it be marked "Plaintiff's Exhibit NN."

Mr. Lewers-Same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit NN-L. L."

Mr. Mills-I will read into the record this exhibit:

"COPY

Dictated.

Portland, Oregon, September 21, 1904.

Mr. C. H. Markham,

General Manager, Southern Company, San Francisco, Cal.

Dear Sir:

Your letter of September 14th regarding the Kern Trading and Oil Company, as to the policy to be pursued by us in regard to existing oil leases to be assigned to that corporation, has been forwarded to me.

I think that the policy outlined in your letter is by all odds the best, and I am very glad indeed to be able to offer some kind of a compromise to our lessees.

It has always seemed to me that the policy heretofore insisted upon was unnecessarily harsh and could do the Company no good. I have had no option, however, other than to pursue it. [799]

I will take this matter up immediately upon my return and I think we can make such a settlement as will give satisfaction all along the line.

I shall have a new oil lease to submit to you, one feature of which will be that the lessees will be restricted to just so much land as they can, and will bind themselves to develop.

The effect of this will be to entirely relieve us from such a condition of affairs as now exists.

I note what you say in regard to the continuance of my connection until all questions under consideration have been disposed of. Please understand that nothing that I have said heretofore C. H. M.—2— should be construed as a desire on my part to escape any work or responsibility in regard to these matters.

I don't know anything about the Kern Trading and Oily Company, and have been left in the dark en-

tirely as to the object and purpose of it.

I did not wish to blunder along and bring myself into collision with Mr. Dumble in regard to matters as to which it would be his right and not mine to decide.

I wish to remind you, once more, that the lease to the Kern Trading and Oil Company, submitted to me, should not go through in its present shape, and that the schedule of lands referred to should be revised and corrected.

However, this is a matter of detail as to which I can satisfy you on my return.

Yours very truly,

CHARLES W. EBERLEIN, Acting Land Agent.

JRH

Compared By: H. K.

L

A" [800]

Q. I show you this paper, and ask you what it is.

A. It is a letter from myself to Mr. E. T. Dumble, dated October 7, 1904.

Q. Is this Mr. Dumble the same Mr. Dumble referred to in the previous exhibit?

A. Yes sir.

- Q. And state how this copy was made.
- A. That is a copy of the carbon copy of my letter to Mr. Dumble.
 - Q. Taken from this file that you refer to?
 - A. Yes sir; taken from a badly damaged file.
- Q. And what became of the copy from which this was made?
- A. Oh, it is gone long ago. There was nothing but dust and ashes left of it when they got through.
- Mr. Mills—We offer this in evidence and ask that it be marked Plaintiff's Exhibit OO.
 - Mr. Lewers-Same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit OO-L. L."

Mr. Mills-I will read this exhibit into the record:

"COPY-From File No. 47

Oct. 7th, 1904.

Mr. E. T. Dumble,

Consulting Geologist,

Bldg.

Dear Sir:

Referring to your note of Oct. 5th., I beg to say I will be glad to take matters up with you as suggested any time tomorrow that will be convenient to you, I would suggest that you [801] might find it more convenient to come to room 71 where we can have a room to ourselves and not be disturbed, if

however, you prefer I should come to your room, please advise me.

Yours truly,

CHARLES W. EBERLEIN, Acting Land Agent.

'Donaldson'

Compared By: H. K.

L A"

Q. What does that refer to, that "Donaldson"?

A. I don't know. I can't imagine what that was. Probably the best they could do, from the carbonized condition of the file. They got the word "Donaldson" there, but what it means I don't know.

Q. I show you this paper, and ask you what it is.

A. That is a copy of the carbon copy of my letter to Mr. E. T. Dumble, of October 8th, 1904.

Q. Was the paper from which that was copied destroyed in the fire?

A. Yes sir; that is my understanding.

Q. And in that file, the same file?

A. The same file.

Mr. Mills—We offer this in evidence and ask that it be marked Plaintiff's Exhibit PP.

Mr. Lewers-The same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit PP-L. L."

Mr. Mills—I will read government's Exhibit PP into the record: [802]

"COPY

Dictated S.

October 8, 1904.

Mr. E. T. Dumble,

Consulting Geologist,

Southern Pacific Railroad Company, Building.

Dear Sir:

Herewith I hand you plats showing the status of lands within the Southern Pacific Railroad Company's grant in

Township 19 South, Ranges 14 and 15 East M. D. M.

Township 20 South—Ranges 14 and 15 East M. D. M.

Township 21 South—Ranges 14 and 15 East M. D. M. Coalinga district, and

Township 30 South—Ranges 21, 22 and 23 East M. D. M.

Township 31 South—Ranges 22, 23 and 24 East, M. D. M.

Township 32 South—Ranges 23 and 24 East, M. D. M. in the McKittrick, Midway and Sunset districts.

Kindly acknowledge receipt.

Yours very truly,

CHARLES W. EBERLEIN,

S

Acting Land Agent.

1068

Inc.

RSG.

Compared By: H. K.

L. A."

Q. Do you know what the initial "S" under your name is?

A. Stone.

Q. Does that refer to Mr. George A. Stone, who testified this morning?

A. Yes sir. [803]

Q. And the same at the top of the page?

A. Yes.

Q. I hand you another paper, Mr. Eberlein, and I will ask you what that is.

A. Copy of C. H. Markham's letter to me, dated October 17, 1904. The original is destroyed. Belonged to the same file as the rest of these letters.

Q. And what you have said about the destruction of the originals applies to this as well as to the other papers contained in that file?

A. Everything contained in that file.

Mr. Mills—We offer this in evidence and ask that it be marked Plaintiff's Exhibit QQ.

Mr. Lewers-Same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit QQ-L. L."

Mr. Mills—I will read government's Exhibit QQ:

"COPY

Southern Pacific Company San Francisco, Cal., October 17, 1904.

Mr. C. W. Eberlein,

Acting Land Agent,

San Francisco, Cal.

Dear Sir:

September 21st I wrote you on the subject of proposed lease from the Southern Pacific Company to the Kern Trading & Oil Company, asking that you kindly check this matter at an early date and let me know from your standpoint whether there is anything in the lease that is really objectionable. Will [804] you kindly advise status of matter at present time.

Yours truly,

(Signed) C. H. Markham.

BCE

GLK

Compared By: H.K.

- Q. I notice that this letter refers to a proposed lease from the Southern Pacific Company to the Kern Trading and Oil Company, and will ask you whether that is the same lease which has been referred to as proposed between the Southern Pacific Railroad Company and the Kern Trading and Oil Company.
- A. Yes sir; it is the same thing that is referred to in all those letters.
- Q. Now, I will show you this paper, and ask you what that is.

A. That is a copy of the carbon copy of my letter to Markham of October 18, 1904.

- Q. And that copy was made under your direction and supervision, the same as the other papers—
 - A. Yes sir.
- Q. —which have been introduced as coming from that file?
 - A. That destroyed file.
- Q. And the paper from which this was copied, you say, has been destroyed in that file by the fire?

A. Yes sir.

Mr. Mills—We offer this in evidence and ask that it be marked Plaintiff's Exhibit RR.

Mr. Lewers-Same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit RR—L.L."
[805]

Mr. Mills—I will read government's Exhibit RR into the record:

"COPY

Dictated.

October 18, 1904.

Mr. C. H. Markham,

Vice-President & General Manager,

Southern Pacific Company,

San Francisco, Cal.

Dear Sir:

I am in receipt of your letter of the 17th instant, calling attention to the matter of the proposed lease from the Southern Pacific Railroad Company to the Kern Trading & Oil Company.

Your letter has anticipated my letter to you on this

subject, Mr. Dumble and I have had this matter under consideration in the past few days.

The consideration of several matters in this connection is not yet complete, for the reason that Mr. Dumble is looking over his data with the intention, as I understand it, of furnishing a new list of lands to be conveyed.

The lease as now drawn conveys some lands outside of the grant, and omits others that should be included.

This is the most important matter connected with this lease, and I think the whole transaction can be closed as soon as Mr. Dumble reports.

Yours very truly,

CHARLES W. EBERLEIN

Acting Land Agent

ESR

Compared By: H. K.

L. A." [806]

Q. Who was E.S.R., do you remember, Mr. Eberlein ${\bf f}$

A. I don't know. Some of the numerous peripatetic stenographers we had right after the fire, I suppose. I don't know.

Q. I show you this paper, and I will ask you what it is.

A. That is a copy of Mr. Dumble's letter—This is a copy of a carbon copy of a letter from E. T. Dumble to Mr. W. H. Bancroft, dated December 7, 1904.

Q. And was this made in the same way and under your direction and supervision?

A. Yes sir.

Q. From a part of the file that you have referred to?

A. Yes sir.

Q. And was the paper from which this was copied destroyed?

A. Yes sir.

Q. These initials C.C. and C.W.E.—what does that mean?

A. It means carbon copy to C. W. Eberlein.

Mr. Mills—We will offer this in evidence and ask that it be marked Plaintiff's Exhibit SS.

Mr. Lewers-The same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit SS-L.L."

Mr. Mills—I will read government's Exhibit SS into the record: [807]

"COPY

Southern Pacific Company San Francisco, Cal., Dec. 7, 1904.

Mr. W. H. Bancroft,

Acting Genl. Mgr., City.

Dear Sir:

In connection with our correspondence regarding the transfer of property to the Kern Trading & Oil Company, I have had a conversation with Mr. Eberlein and it seems for reasons of policy regarding certain unpatented lands that it will be best not to execute the lease of lands between the S. P. R. R. Co. and the K. T. & O. Co. at present.

I would, therefore, suggest that the papers covering the transfer of property from the S. P. Co. to

K. T. & O. Co. be executed and that the lease of lands in the McKittrick and Coalinga districts from the S. P. R. R. Co. to the K. T. & O. Co., be held up for the present.

Yours very truly,

D-R

(Signed) E. T. DUMBLE.

CC CWE

Compared By: H. K.

L. A."

Q. Who was Mr. Bancroft?

A. He was the vice-president and general manager of the Oregon Short Line, headquarters at Salt Lake City. At the time that letter was written he was temporarily the acting general manager of the Southern Pacific Company. Mr. C. H. Markham resigned, I think, in October—I believe it was October; and pending the appointment of a successor Mr. Bancroft occupied the—warmed the seat of general manager at headquarters. [808]

Q. I understand you to say that the initials "C. C." "C. W. E." means that a carbon copy of this letter to Mr. Bancroft was sent to you?

A. Yes sir.

Q. And was preserved in that same file.

A. Yes sir.

Q. I show you this paper, Mr. Eberlein, and ask you what it is.

A. That is the original carbon copy of a personal letter from myself to W. D. Cornish, dated September 3, 1904.

Q. Who was Mr. W. D. Cornish at that time ?

A. He held the title of vice-president of the Southern Pacific Company, and he was my superior officers in land matters.

Q. This I understand to be your own carbon copy of the original letter which you transmitted to Mr. W. D. Cornish on the date that it bears?

A. Yes sir.

Q. You were personally acquainted with Mr. Cornish, were you not?

A. Yes sir, very well acquainted with him; for a

great many years.

Q. Now, after the transmission of this letter to Mr. Cornish, did you ever have any talk with Mr. Cornish relative to any disposition which he made of all the letters sent to him by you?

Mr. Lewers—To which we object, on the ground that that is calling for hearsay testimony.

A. Yes; I talked with him.

Q. By Mr. Mills—And where was that talk, Mr. Eberlein?

A. On a private car out of Ogden, in the fall of 1907.

Q. Will you state what, if anything, he said about the destruction of any letters which he had received from you? [809]

Mr. Lewers—We renew the same objection; on the ground that no foundation has been laid and it is

calling for purely hearsay testimony.

A. He said that inasmuch as these letters, reports from me, that he held having come from me in all those years, inasmuch as the papers of the company in the Land Office were destroyed, why, he had destroyed those.

- Q. By Mr. Mills—Did he say anything about having destroyed all of the papers which he received from you?
 - A. That is what I understood him to say.
- Q. Had this letter, prior to the time that he made that statement to you, been transmitted to him?
 - A. Yes. Oh, yes.
- Q. Will you please examine that carefully and state whether it is a correct copy of the letter which you sent to Mr. Cornish?
 - A. Yes; that is the exact copy.

Mr. Mills—We offer this letter in evidence, and ask that it be marked Plaintiff's Exhibit TT.

Mr. Lewers-Same general objection.

The copy of letter last referred to and offered in evidence is marked "Plaintiff's Exhibit TT-L.L."

Mr. Mills—I will read this into the record, it being a letter consisting of four pages:

"Dictated. Personal September 3, 1904.

Hon. W. D. Cornish,

Vice President, Southern Pacific Company, 120 Broadway, New York. [810]

Dear Sir :-

As you are aware, the Kern Trading and Oil Company has been organized.

I am totally in the dark as to the objects, rights, etc., of this corporation. I have asked for information several times, but it has never been furnished me.

I was told in a general way that this company was organized for the purpose of taking over the oil lands of the Southern Pacific Railroad Company and operating the same.

A lease has been made for the term of ten years from the first of January, 1904, with a renewable term of the same period.

The lease is made by the Southern Pacific Railroad Company to the Kern Trading and Oil Company, and covers all the lands now in the ownership of the Company that either are or are supposed to be oil bearing.

The consideration for this lease is a royalty of onetenth of the gross product, or, "one-tenth of the gross amount of moneys received from the sale of said minerals, substances and products".

This lease was concocted without any reference to me, and it has now been sent over for me to execute on behalf of the Southern Pacific Railroad Company. W.D.C.—2—

I don't know that there is any particular objection to it, as perhaps one-tenth of the product may be fair.

The Company now receives one-fifth in some cases and in other cases one-eighth, and this is at a still lower rate. However, I do not object to that.

I am, however, somewhat slow about signing this document and tying the railroad company up for a series of years.

Of course I know that it is for the benefit of the [811] Southern Pacific Company, but there is one feature which seems to me to be important. Inasmuch as the lease is made by the Land Department,

and the head of that department is taking the responsibility therefor, it does not seem proper that the Southern Pacific Railroad Company shall have nothing to say in regard to the disposition of its royalty oil.

The lease provides that the oil may be sold and the one-tenth of the moneys received be turned over to the Land Department.

It leaves the matter entirely in the management of the Southern Pacific Company, or the Kern Trading and Oil Company, I don't know which.

In all events it is possible for some man not connected with the Land Department, nor with the Southern Pacific Railroad Company, to make a price on royalty oil belonging to the railroad company and sell it. There is no provision in the lease that the price to be received, in case the oil is sold, shall be the market price, or any other price.

You can see that there is a wide open door for the disposition of the Land Department property at ruinous prices, thus

W.D.C.-3-

depriving the Land Department and the bond holders of a fair return for their property.

I feel that it is incumbent upon me to look somewhat into this instrument, and into the future. I know that it is hardly probable but still it is possible that the control of this oil company may by some contingency pass out of the present hands, and if it should fall into hostile control the railroad company would get very much the worst of it.

As I have already stated, this matter has been hatched for my signature without submission to me, or without consultation.

I know the answer, in case the question was raised, would [812] be that it is all a family matter and that I need not concern myself about it.

However, I take it that you are somewhat interested in this matter, and I want your advice as to what you think would better be done to protect us against future complications.

Do you think it would be wise and expedient and would it serve the purpose of protection if I were to demand action of the Board of Directors of the Southern Pacific Railroad Company ratifying and confirming the lease as it stands, and directing the Land Agent to sign the lease.

It seems to me that some such action is not only desirable but necessary, inasmuch as it conveys control of the most valuable lands in the grant for a long term of years.

This lease has been lying here for sometime during my absence and I may be called upon for it at any time. I would therefore esteem it a great favor if you would give me any suggestions you may have by wire.

I can stave off the delivery of this document for some time yet, I think, for the reason that if the knowledge of this

W.D.C.-4-

lease becomes public property it will probably cause us a great deal of trouble in the United States Land Office, and may result in the loss of a large body of adjacent lands which may hereafter turn out to be mineral and oil bearing.

I found on taking charge of this office that a large body of our lands, especially Indemnity lands in the Coalinga, McKittrick and Sunset fields, had been withdrawn by the United States from entry, pending examination as to their mineral character.

I have worked very hard and very steadily to get the United States to complete its report and dispose of this matter. I have just succeeded in getting the Special Agent in charge to [813] make a report releasing our land from interdictment.

If it becomes known that we have executed a lease of lands interspersed with those already under selection by us, and that the lease is for oil purposes, it seems to me that it will immediately encourage oil speculators to file upon the lands so selected and that the government will have good ground for refusing patent, inasmuch as we practically fix the mineral status of the land by this lease.

Yours very truly, CHARLES W. EBERLEIN, Acting Land Agent.

JRH."

Q. Now, you have referred in this letter dated September 3, 1904, to a large body of adjacent lands which may hereafter turn out to be mineral and oilbearing. Are those the lands to which you referred in the previous question that I asked you where you referred to a map, in 30-23?

A. Why, no. Those lands were—What is the date of this letter?

Q. This is September 3, 1904.

A. Those lands were all selected and the selection list approved. No; there were other lands in the same neighborhood.

Q. There were other adjacent lands which you referred to, you say?

A. Yes sir; unpatented, unselected lands in that same township—same range, rather.

Whereupon the further taking of testimony herein was adjourned until Saturday, May 18th, 1912, at 10 o'clock A. M. [814]

On Saturday, May 18, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed.

CHARLES W. EBERLEIN,

recalled, DIRECT EXAMINATION resumed: By Mr. Mills:

Q. Mr. Eberlein, I asked you yesterday in connection with government's Exhibit KK regarding this language in that letter: "We have selected a large body of lands interspersed with the lands sought to be conveyed by this lease, and which we have represented as non-mineral in character," and you have stated that that referred to the lands marked in brown on this map, or the south half of Township 30 South, Range 24 East. Now, I also asked you yesterday respecting government's Exhibit TT, which was a letter addressed to Mr. W. D. Cornish, vice-president of the Southern Pacific Company, dated September 3, 1904, respecting the follow-

ing language in this exhibit: "I can stave off the delivery of this document for some time yet, I think, for the reason that if the knowledge of this lease becomes public property it will probably cause us a great deal of trouble in the United States Land Office, and may result in the loss of a large body of adjacent lands which may hereafter turn out to be mineral and oil-bearing." What did you refer to in that letter when you spoke of the "large body of adjacent lands which may hereafter turn out to be mineral and oil-bearing"?

- A. I undoubtedly referred to lands in 30 South, 23 East.
 - Q. Mount Diablo Meridian?
 - A. Yes, and those south of it.
 - Q. And the lands south of those lands, in 31-23?
 - A. Yes sir.
 - Q. And 31-24, which were unsurveyed?
 - A. Yes; they were unsurveyed at that time. [815]
- Q. And the lands which you have designated as in Township 30 South, Range 23 East, were lands which had then been selected by the Southern Pacific Railroad Company, but which had not yet been patented? Is that correct?
 - A. That is correct.
- Q. Mr. Eberlein, referring to the exhibits which constitute certain correspondence between the officials of the Southern Pacific Railroad Company defendant and Southern Pacific Company defendant, and which yesterday you have stated were kept in a file, where was that file kept before the fire?

A. This particular file, do you refer to?

Q. Yes. The file referred to containing these papers.

A. That was not kept in the files at all. Part of the time it was kept in the safe-deposit vaults; at other times when it was needed it was brought into the office and kept in a separate place in the vault; in the safe, I think.

Q. What was the purpose of keeping that file separate from other correspondence?

A. Because it referred to that attempted lease.

Q. At the time of the fire where were the papers?

A. These papers at that time were in the safe in the vault of the company.

Q. And is that where they were discovered after the fire?

A. After the fire they were taken out of there.

Q. Now, in what respect was this attempted lease an excuse to separate these papers from the other papers in the general course of business kept in the vault of the Land Department?

A. I did not propose that it should be common property at all. There was no lease, because I had refused to sign it. I had given instructions to the assistants there—the chief clerks—that they were not to recognize that lease in any way. [816]

Q. What was the purpose of keeping the files separate from the rest of the correspondence?

A. Because they referred to that lease. They referred to that lease and they referred to the action taken by the land agent in not recognizing that lease.

Q. And for that reason did you think it was necessary to keep the papers separate?

A. I certainly did. They should not be scattered all through the files, with references to that lease as a lease, and the first thing you know somebody would slide in a voucher to be approved under that lease, and that would be a recognition of it or would be supposed to be—or held to be.

Q. I show you this paper, Mr. Eberlein. Will you state what that is?

A. That is a map of part of the indemnity limits of the Southern Pacific grant lying in Townships 30, 31 and 32 South, Ranges 22, 23 and 24 East, Mount Diablo Meridian.

Q. Please state what these lands marked in red were?

A. Those are, as appears from that legend, a part of the lands in the lease that was intended to be made from the Southern Pacific Railroad Company to the Kern Trading and Oil Company.

Q. Does the legend correctly designate the character of the lands on the map?

A. The character, do you mean, as to patent and survey?

Q. Yes.

A. I believe it does. It was made up from the records at that time.

Q. I notice the initials "G. A. S." and "J. R. D."

A. This was made up by Mr. Stone and checked by him and J. R. Daly who was then a clerk.

Q. Will you tell me whose handwriting those initials are? [817]

A. That is Stone's handwriting, "G. A. S.", and that is Daly's, "J. R. D."

Q. Who prepared this map, to the best of your recollection?

A. Who did the actual manual work—I can't tell you that. I was not in the department much of the time. It was prepared by Mr. Stone.

Mr. Mills-We offer this map in evidence.

Mr. Lewers—Objected to on the ground that no sufficient foundation is laid; it is not properly identified by any person who made it, and it is purely hear-say.

Mr. Mills—I believe the witness stated he did most of the manual work on the map.

A. That I did?

Q. Yes.

A. No; I am not an artist; I didn't do it.

Q. It doesn't look as though an artist did that coloring.

A. No; it looks as if a house-painter did.

Q. Do you know whether that was made under your direction?

A. I don't remember. It probably was. It was probably made under Mr. Stone—I issued the order for it, I suppose, and told him I wanted to see it platted out.

Mr. Lewers-I move to strike that out as a suppo-

sition of the witness.

Q. By Mr. Mills-What was the date?

- A. September 16, 1904.
- Q. Where did you get this map after the fire?
- A. I got it with the lease. It was right with it, a copy of it.

The map last referred to and offered in evidence is marked "Plaintiff's Exhibit UU—L. L." [818]

- Q. Mr. Eberlein, you have stated in the first part of your examination that as part of the duties and functions of George A. Stone, he was empowered to sign leases for the railroad company of certain lands?
 - A. Yes sir.
- Q. Do you know whether any lease was ever executed by the Southern Pacific Railroad Company and one Brewton A. Hayne and Sally P. Hayne, his wife, and George D. Roberts and Julia A. Roberts, his wife, and the Zier Oil Company, during the time that you were acting land agent for the defendant railroad company?
- A. The Hayne lease was in existence when I came there, as I recollect it. There was a great deal of negotiation with Hayne. He was in default, and I think some extensions or some modifying instrument was executed while I was there.
- Q. I call your attention to this paper which I have in my hand which purports to be a lease between the Southern Pacific Railroad Company and the Haynes, Roberts and Zier Oil Company, dated some time in 1906. Will you please look at the signatures and state whether that is the lease you referred to?

A. This, I believe—I have not examined it thoroughly—I believe this is a sub-lease or some modifica-

tion of the original lease. The original lease to Hayne, I can't say the number of it—there it is—G-45, and bore date 19th of January, 1901, and then he was permitted, as I understand this, to—

Mr. Lewers—I object to any interpretation of the document. The document is the best evidence.

Well, we will just say that this is a sub-lease.

Mr. Mills—We offer this instrument which is a certified copy of an instrument on file in the county recorder's office of Fresno county, California, purporting to show that the Southern Pacific Railroad Company by Charles W. Eberlein, its [819] acting land agent, by George A. Stone, assistant acting land agent, leased certain property in Fresno county to the parties named in the lease.

Mr. Lewers—May I inquire the office of this? Do you want to bring the county recorder of Kern county into this conspiracy?

Mr. Mills—Your attempted wit is getting exceedingly cumbersome, Mr. Lewers.

Mr. Lewers—Then you have no purpose in offering it?

Mr. Mills-No such purpose as that.

Mr. Lewers—We object to the document on the ground that it is subsequent to the time of the patent involved in this case, and on the further ground that it appears to concern property a long distance or a great distance from the land in controversy in this case, and on the general ground that it is irrelevant to any issue in this case.

Mr. Mills-I will state here for the benefit of coun-

sel that the purpose of introducing this is to show that Mr. George A. Stone was empowered to sign leases.

The certified copy of lease last referred to and offered in evidence is marked "Plaintiff's Exhibit VV—L. L."

Mr. Mills—We offer in evidence a certified copy of the articles of incorporation and consolidation of the Southern Pacific Railroad Company.

Mr. Lewers-No objection to that.

The certified copy of articles of incorporation and consolidation of the Southern Pacific Railroad Company last referred to and offered in evidence is marked "Plaintiff's Exhibit WW—L. L." [820]

Q. By Mr. Mills—Mr. Eberlein, the lands in this suit are known as a portion of Section 15, 17, all of 19, 21, 23, 25, 27, 29, 33 and 35 of Township 30 South, Range 23 East. Do you remember the circumstances connected with the selection of those lands in the indemnity limits of the Main Line Grant?

A. Yes sir.

Q. Will you please state what those circumstances were?

A. When I took charge of the affairs of the land department of the Southern Pacific, I found there was a large amount of base unused, which I instructed my assistants to prepare a list and make indemnity selection for.

Q. What year was that?

A. 1903, I think in the month of August; and the list was made up by Mr. Stone.

Q. Permit to interrupt you long enough to ask you how long you had been there in the capacity of land agent at that time?

A. Less than a month, I think. It was in August —yes, it was in August, 1903, that that list was made up.

Q. Did you send anybody out over the lands to examine them and ascertain their character at that time?

A. No sir; it was not necessary.

Q. On whose judgment did you rely as to the character of the land?

A. On Mr. Stone's.

Q. George A. Stone?

A. George A. Stone had been for years the field examiner of the Southern Pacific Railroad Land Department. He was thoroughly familiar with the land, so he told me.

Q. He made no special trip on that occasion?

A. Not on that occasion.

Q. To ascertain the mineral or agricultural character of [821] the land?

A. No.

Q. Did you know anything about the lands yourself?

A. Nothing.

Q. Did you have any personal knowledge whatever?

A. Absolutely none.

Q. Had you ever seen the land?

A. Never.

- Q. That, you say, was in 1903. In 1904 you wrote a letter to Mr. C. H. Markham which has been introduced here as government's Exhibit KK, in which you used the following language: "In addition to this there is a very urgent reason for delaying the execution of these papers." By those papers you meant the attempted lease that you have referred to?
 - A. Yes.
- Q. "We have selected a large body of lands interspersed with the lands sought to be conveyed by this lease, and which we have represented as non-mineral in character." By that did you refer to the lands in suit?
 - A. Yes sir.
- Q. "Should the existence of this lease become known it would go a long way toward establishing the mineral character of the lands referred to, and which are still unpatented." What lands did you refer to?
 - A. The lands in 30 South, 23 East.
- Q. "We could not successfully resist a mineral filing after we have practically established the mineral character of the land. I would suggest delay at least until this matter of patent can be adjusted." You have spoken of E. T. Dumble. On the date of this letter, Mr. Eberlein, which is September 10, 1904, had you obtained any knowledge as to Mr. Dumble's activities with reference to the unpatented lands inuring to [822] the Southern Pacific Railroad Company under its grant of July 27, 1866?
 - A. I became aware when that lease was sprung

on me that he had been—that he made examinations, yes. That was my first knowledge of it.

Q. Was that the first time you suspected that these lands might turn out to be mineral in character or might be mineral in character?

A. I did not suspect them of being mineral in character at the time I made that non-mineral affidavit.

Q. I am talking about the time when you wrote Mr. Markham and also when you wrote Mr. Cornish under date September 3, 1904, in which you used this language, in the first letter: "We have selected a large body of lands interspersed with the lands sought to be conveyed by this lease, and which we have represented as non-mineral in character" and later "Should the existence of this lease become known it would go a long way toward establishing the mineral character of the lands referred to, and which are still unpatented." Did that lease raise anything in your mind?

A. It certainly did.

Q. What was it?

A. It put me on inquiry as to why those lands were attempted to be conveyed by that lease. They were attempting to convey lands supposedly non-mineral to an oil development company.

Q. And by that company you refer to what?

A. The Kern Trading and Oil Company. Now, they may have been sought to be transferred for some other purpose than oil, but the inference was pretty strong, and I felt and I knew certainly that it would work against the company.

- Q. At that time had you learned that Mr. Dumble was acting without your knowledge and not in conjunction with your depart-[823]-ment as to the examination of these lands?
 - A. That is true.
- Q. Did you ever make any protest to any of the officials of either company, the Southern Pacific Company or the Southern Pacific Railroad Company, against the practice of Mr. Dumble and his men examining lands not yet patented to the railroad company?
- A. He was acting without any conjunction or any understanding with me. I didn't know the character of the land that he examined, and I did protest and protested vigorously.
 - Q. To whom did you protest?
 - A. To my chief in New York.
 - Q. Who was your chief?
 - A. Mr. Cornish.
 - Q. W. D. Cornish?
 - A. Yes.
- Q. He was vice-president of the Southern Pacific Company?
 - A. Yes.
- Q. Was he your chief as land agent of the Southern Pacific Railroad Company?
 - A. Yes.
 - Q. How do you explain that, Mr. Eberlein?
 - A. I can't explain it, except that it is a fact.

Q. Was Mr. Cornish to your knowledge an officer of the Southern Pacific Railroad Company as well?

A. I do not know that fact. I suspect he was, but I have not—I can't testify as to that off-hand now.

Q. Well, you made protest to him against this activity of Mr. Dumble and his men. That letter which I have asked you about—government's Exhibit TT—was that the protest that you sent him?

A. Oh, no. I protested in conversation with him frequently.

Q. When ? [824]

A. At different times from that time on; just as long as I was there. And also I had talks with Mr. Markham about it at the time this lease was attemted to be made.

Q. C. H. Markham?

A. Yes sir.

Q. The gentleman who is the addressee in government's Exhibit KK, general manager, Southern Pacific Company, dated September 10, 1904?

A. Yes sir.

Q. What talk did you have with Mr. Markham?

Mr. Lewers—We object on the ground that it is calling for hearsay testimony.

Mr. Mills—I think the record will show that it is quite pertinent, conversations between the head of the Land Department of the Southern Pacific Railroad Company and the general manager of the Southern Pacific Company.

A. I just pointed out to Mr. Markham that people acting without any kind of knowledge of what they were doing, without any reference to the selection list of the company, without any reference to whether the lands were patented or even surveyed,—that it was charging the company with notice. It didn't charge me with notice, but it certainly would be the grounds on which to get in and protest the patents or protest the lists, and so the fact turned out to be.

Q. Did you have more than one conversation with Mr. Markham with respect to that protest?

A. Yes; I think we talked about it a number of times, my recollection is.

Q. Did you continue those protests from time to time until a later period?

A. Oh, yes; clear up to the last, I think.

Q. The letter dated September 10, 1904, addressed to Mr. Markham, [825] in which it appears that you made a protest, and called government's Exhibit KK, was that the first protest you made to him or was it subsequent to any conversation?

A. Oh, Mr. Markham and I had several rather heated arguments, and I objected to Mr. Markham's interference with the Land Department. I was not under his orders at all.

Q. Do you know Mr. Henry Conlin?

A. Yes.

Q. Who was Mr. Conlin?

A. Mr. Conlin was a clerk in the department from 1905, some time, and afterwards my assistant, and succeeded me as acting land agent.

Q. During the time he was your assistant did Mr. Conlin have the same powers and functions during

your absence that you would have, except where your appointment was limited to your personal acts?

- A. Yes sir; he covered everything. He had to have very full authority, because I was absent in New York a very large part of the time.
- Q. Were you acting land agent as late as February 22, 1908?
 - A. Yes sir; till June 1, 1908.
- Q. I show you this paper, Mr. Eberlein, and ask you when you first—I will ask you, in the first place, if that is in your handwriting. You may read it through.
 - A. Yes sir; that is my letter.
 - Q. What is the date of that letter?
 - A. February 22, 1908.
- Q. Do you know whether this letter was transmitted to Mr. Conlin by you?
- A. I think it was. I have never seen it since it was written, but I must have sent it.

Mr. Mills—With the statement that we will call Mr. Conlin [826] to show what became of the letter after it left Mr. Eberlein's hands, we will offer it in evidence.

Mr. Lewers—We object on the ground that it is long subsequent to the issuance of the patent in this case and not shown to have any connection with the lands in controversy. On the further ground, that no sufficient foundation has been laid for its introduction.

Mr. Mills—I will read this into the record. "Feb. 22, 1908. Mr. Conlin—The New York Office has for-

bidden the giving out of any more printed lists of lands because of the unsatisfactory condition of our titles which must not be disclosed. The examination of our S. P. lands not yet patented by our oil experts must be stopped as information that they may obtain or give as to mineral character prior to patent will forever prevent our getting titles. Should Mr. Calvin call for any lists please take this memo. to him and explain our situation and refer him direct to New York office. Please advise him too of the pressing necessity of the return of lists sent in a year ago for entry of lands to be reserved for company purposes. Mr. Dumble and his men should not be furnished by us with any data whatever except as to patented lands. For reasons above given such information will be embarrassing to them and us and may make them witnesses against this company in mineral contests hereafter. (Signed) Chas. W. Eberlein, Acting Land Agent."

The letter last above referred to and offered in evidence is marked "Plaintiff's Exhibit XX—L. L."

- Q. I ask you, Mr. Eberlein, where that letter was written?
 - A. Written in New York.
- Q. What do you mean by the "New York office" used in this letter, or what did you mean? [827]
- A. I meant the authority over land affairs which was vested there.
 - Q. And what authority was that?
 - A. Well, the authority of W. D. Cornish.

- Q. Who at that time was vice-president of the Southern Pacific Company?
 - A. Yes sir.
- Q. Now, did you understand and was it a fact that Mr. Cornish exercised authority over the land affairs in the Land Department of the Southern Pacific Railroad Company?
 - A. That was his duty-part of it.
- Q. And how long and from what time to your knowledge did that exist?
- A. From the summer of 1903 over these lands out here on the coast.
- Q. Do you know whether or not those lands were ever shown in any balance sheet of either company as assets of either company?
 - A. Do you mean the value of granted lands?
- Q. Yes; the lands themselves and the value of the granted lands.

Mr. Lewers—Objected to as calling for the conclusion of the witness on matters which in the very question itself it appears are best shown by the document itself, if there is such a document. And on the further ground that it is irrelevant to any issue in this case.

- Q. By Mr. Mills—You may answer.
- A. No.
- Q. They were never carried on the balance sheet?
- A. No; the value of the granted lands never appears in any balance sheet, only the collections from sales, leases, and actual collection of money. [828]
 - Q. Now, you refer in this letter to the fact that

the New York office has forbidden the giving out of any more printed lists of land. What were those printed lists?

A. A printed list was a complete classified list of all the lands, divided in this grant into hundred-and-sixty-acre tracts. That is, we had a printed list of all the granted lands of the company, classified by counties, into patented and unpatented selected lands, unpatented selected lands, unsurveyed lands and lands subject to contract. That is, sold lands under contract.

Q. You have stated in this letter that the New York office had forbidden "the giving out of any more printed lists of lands because of the unsatisfactory condition of our titles which must not be disclosed." By that what did you mean?

A. I meant after the fire we were completely cleaned out and had to make an entirely new set of books. We had to get our contracts for the sale of land, amounting to hundreds of thousands of dollars, that had been burned, and we had no evidence of them. We had to supply that by examinations in the Land Office, first, and in the county offices, and by every other means that we could take to supply that information; and in some cases it turned out that people took advantage of that fact, knowing that we were without any data at all regarding the lands that were sold under contract, and they altered the terms of their contracts in some cases.

Q. The sentence immediately following: "The examination of our S. P. Lands not yet patented by

our oil experts must be stopped as information that they may obtain or give as to mineral character prior to patent will forever prevent our getting titles." Was that statement a continuation by you of the accustomed protesting which you said started as soon as they offered the lease to you? [829]

A. Oh, yes; that is simply the same old thing, only we were suffering a great deal more from the activity of Mr. Dumble at that time—his interference almost every day.

Q. "Should Mr. Calvin call for any lists please take this memo to him and explain our situation." Who was Mr. Calvin?

A. Vice-president and general manager of the Southern Pacific Company.

Q. And he was calling for lists of land of the Southern Pacific Railroad Company?

A. Yes.

Q. Some lists had been furnished him prior to that time?

A. Yes sir.

Q. You say "Please advise him too of the pressing necessity of the return of lists sent him a year ago."

A. They had been furnished him for the purpose of having him note what lands should be reserved. At the time of the fire the records were completely destroyed. There were lands that were reserved for operating purposes. That is what it was sent to him for, so as to renew that data. It so happened that in a great many cases lands were reserved on our

books from sale or any disposition—lands which were needed for the extension of yards or for water or for a number of purposes, either present or prospective, for operation or traffic.

Q. I call your attention to this statement: "Mr. Dumble and his men should not be furnished by us with any data whatever except as to patented lands." The word "patented" is underscored. What did you underscore the word "patented" for?

A. That is axiomatic in this connection. Mr. Dumble should certainly have nothing to do with any lands except such as were patented. If he did, it was simply—we had no control over Dumble and didn't know what he was doing and no means of finding what he was doing. [830]

Q. Did Mr. Dumble ever come to you in 1903 or '04 and give you information as to the mineral character of any lands?

A. No sir; I didn't know Mr. Dumble in 1903.

Q. You have referred to this attempted lease, Mr. Eberlein, which is dated the 2nd day of August, 1904. I will ask you if that is the original attempted lease which was offered to you by Mr. Markham as you have stated?

A. Yes sir; that is the original.

Q. I notice that it is in a bad state of preservation.

A. That was baked in the fire of 1906 and happened to be in the vault at that time.

Q. Was that lease in the file that you referred to?

A. Yes; it was kept with those papers.

Q. Will you read, please, whether there are any signatures there and state whose they are if you know them?

A. Kern Trading and Oil Company by C. H. Markham, president.

Q. Do you know whether Mr. Markham signed that attempted lease?

A. Yes sir.

Q. How do you know that fact?

A. He signed it in my presence.

Q. Now, I notice the words "Approved as to form (Signed) William F. Herrin." Are you acquainted with his signature?

A. Yes sir.

Q. Is that his signature?

A. Yes.

Q. "Description of property correct (Signed) E. T. Dumble." Do you know whose signature that is?

A. That is Mr. Dumble's signature.

Mr. Mills—I suggest that when we offer this in evidence we substitute a copy of this in evidence.

[831]

Mr. Lewers—Substitute a copy, but leave the original as an exhibit.

Mr. Mills-We offer that in evidence.

Mr. Lewers—We object to the introduction of the document offered in evidence, on the ground that no sufficient foundation has been laid to account for its production and its source, and that it is not relevant, as appears on the face thereof, to any of the issues

in this case, inasmuch as it does not concern any of the land involved in this litigation.

The lease last referred to and offered in evidence is marked "Plaintiff's Exhibit YY—L. L." And, a copy thereof is also marked "Plaintiff's Exhibit YY—L. L." and placed in the files of Exhibits with the Special Examiner, as follows:

"THIS INDENTURE, Made this 2nd day of August, 1904, by and between SOUTHERN PACIFIC RAILROAD COMPANY, a corporation consolidated and incorporated under the laws of the State of California and of the Territories of Arizona and New Mexico, and having its principal place of business in the City and County of San Francisco in said State, the party of the first part, and KERN TRADING AND OIL COMPANY, a corporation incorporated and existing under the laws of the State of California and having its principal place of business in the City and County of San Francisco in said State, the party of the second part.

WITNESSETH;

That the party of the first part, for and in consideration of the royalties hereinafter set forth to be paid by the said party of the second part to the said party of the first part, hereby grants unto the said party of the second part and to its successors and assigns, for the term of ten years from the first day of January, 1904, together with a privelege of an extension or [832] renewal of said term for the further period of ten years thereafter, provided that notice, in writing, of its intention to demand the same shall

be given by the party of the second part to the party of the first part prior to the expiration of said first term, the right to mine, excavate, bore, drill and sink for and otherwise collect and develop asphaltum, petroleum, natural gas, tar gypsum, coal or other valuable minerals, substances or products under or upon the lands and premises hereinafter described; also to remove and sell said minerals, substances and products so obtained therefrom; also to construct thereon, maintain, and use such buildings, fixtures and machinery as may from time to time be needed or convenient in carrying on said business and mining operations, and to occupy such portions of said premises as may be necessary or convenient for the same, or for use in connection therewith, and to construct and maintain over, across and along said premises such telephone lines, pipe lines, canals, ditches, roads and highways as may from time to time be needed or convenient, together with the right of way over and along said lands for the passage and conveyance of the said party of the second part, its agents and employees, supplies and machinery.

THE PARTY OF THE SECOND PART shall pay to the said party of the first part, as royalty for and during the term hereby granted, and for and during any extension or renewal thereof as hereinbefore provided for, the one-tenth part of the gross amount of all natural gas, petroleum, tar, gypsum, coal and other minerals, substances and products extracted or obtained from said lands and premises, or the one-tenth part of the gross amount of moneys received

from the sale of said minerals, substances and products.

ALL OF THE PRODUCTS or substances herein mentioned that may be produced on or from said lands, shall be collected by the party of the second part in such manner that the same may at all times during business hours be examined, measured or gauged by the [833] party of the first part, or its agents, without let or hindrance; and said party of the second part shall keep true and correct account of all said products or substances obtained, which account shall be subject to examination by the party of the first part, or its agents, at any and all times during business hours. And for the purpose of fixing the amount of royalty to be paid as aforesaid, the party of the second part shall, on or before the 10th day of each calendar month, furnish correct written statements to the Land Agent of the party of the first part of the full amount of any and all products or substances that may have been obtained or extracted on or from said land by it during the preceding calendar month, and the delivery of said minerals and substances, or payment therefor as royalty as aforesaid, shall be made on or before the 15th day of each calendar month

IF THE PARTY OF THE SECOND PART shall at any time construct any pipe lines for the transportation of gas, petroleum, or other products or substances from said land to any shipping point, the party of the first part shall have the right or option of transporting its share of said gas, petro-

leum or other products or substances through said lines at the actual cost of such transportation.

AND IT IS HEREBY AGREED that if any royalty shall be unpaid for sixty days after the same shall become due and payable, or if default shall be made in any of the covenants herein contained, all rights of the party of the second part in and upon said premises shall, at the option of the party of the first part, cease and determine.

IT IS UNDERSTOOD AND AGREED by and between the parties hereto that the party of the first part its officers and agents shall have the right to go in and upon any portion of said lands and premises occupied by the party of the second part, during said term or any renewal or extension thereof, to inspect the work done or [834] the progress thereof on said lands, and the products and minerals obtained therefrom, and to fix any notices on the said lands that it may deem fit and proper.

THE PARTY OF THE SECOND PART shall have the right to take for its own use and benefit any oil, water or dry asphaltum discovered upon said premises, for fuel, mechanical and domestic uses necessary in the development of said lands, and no royalty shall be chargeable thereon.

The party of the second part furthermore agrees to pay, without suffering them to become delinquent, all taxes and assessments whatever which during the term of this lease may be charged, assessed, levied or imposed upon any improvements placed by said second party upon said lands and premises. THE PARTY OF THE SECOND PART hereby further agrees that it will not permit or suffer any mechanics', materialmen's, laborers' or other liens of any kind or nature to attach against said lands and premises for any work that shall be done or materials that shall be furnished thereon at the instance or request of said party of the second part.

AND IT IS EXPRESSLY AGREED THAT all mineral and other products, goods, wares or merchandise shipped from said premises by rail by the party of the second part shall be forwarded over the railroad lines of the party of the first part and of the Southern Pacific Company of Kentucky, the lessee of said lines, the leasehold estate of which company in said lines is hereby acknowledged; and also that the choice of routes over which all freight so shipped from said premises shall be forwarded when consigned or destined to a point beyond the line or lines of railroad of the said party of the first part or the said Southern Pacific Company, shall be fixed and determined by said Southern Pacific Company; provided, however, that the rate of charge to be made thereon shall not exceed the rates at the time in force [835] on other rail routes.

IT IS MUTUALLY UNDERSTOOD AND AGREED by the parties hereto that all of the terms, covenants, conditions and obligations in this instrument contained shall also be binding upon the successors and assigns of the parties hereto.

NOTHING in this instrument contained shall be construed so as to limit the right of the party of the first part to lease or convey to persons other than the party or parties of the second part the lands and premises above referred to, or any part thereof, subject to the rights and privileges therein granted to the party of the second part by this instrument, but every such lease or conveyance shall contain an express provision that the same is made subject to the rights of the party of the second part hereunder.

AND IT IS AGREED that at the expiration of the term aforesaid, or any renewal or extension thereof, or any sooner determination thereof, the said party of the second part will quit and surrender the said lands and premises in as good state and conditions as reasonable use thereof will permit, damages by the elements alone excepted.

THE LANDS AND PREMISES hereinbefore referred to are as follows:

ALL of those certain lands situate, lying and being in the County of Kern, State of California, known and described as follows, to-wit: [836]

KERN DISTRICT:

Township 29 S., R. 28 E.

NE 1/4, NW 1/4, N 1/2 of SW 1/4, and NW 1/4 of SE 1/4 of sec 3.

McKITTRICK DISTRICT:

Township 30 S., R. 21 E., Sec. 1.

Township 30 S., R. 22 E.,

Secs. 5, 7, 9, 11, 13, 15, 23, 25, 33;

N 1/2 and SE 1/4 of 21;

N 1/2 and SE 1/4 of 27;

N1/2 and SE 1/4 of 35.

Township 30 S., R. 23 E., Sec. 31.

Township 31 S., R. 22 E.

NE 1/4 of Sec 15;

NE 1/4 of Sec 23;

NE 1/4 of Sec 25.

Township 31 S., R. 23 E.

Secs 5, 9, 15, 21, 23, 25, 27, and 35;

E 1/2 of Sec 7.

Township 31 S., R. 24 E., Secs 31 and 33.

MIDWAY AND SUNSET DISTRICTS:

Township 32 S., R. 23 E.

Secs 3, 11 and 13;

N 1/2 of Sec 5.

Township 32 S., R. 24 E., Secs 3, 5, 11 and 13.

ALSO all of those certain lands situate, lying and being in the County of Fresno, State of California, known and described as follows, to-wit:

COALINGA DISTRICT:

Township 19 S., R. 15 E., Secs 27, 31, 33, 35, (including Leases on Sec. 31.)

Township 20 S., R. 14 E., Sees 1, 13, 23, and 25. (Including leases on each)

Township 20 S., R. 15 E., Secs 3, 5, 7, 17 and 29, (Including leases on Sec 7);

W 1/2 sec 9;

N 1/2 and SE 1/4, Sec 19;

W 1/2 sec 21;

N 1/2 sec 31;

W 1/2 and SE 1/4 sec 33.

Township 21 S., R. 14 E., Sec. 25.

Township 21 S., R. 15 E.

1108

Secs 1, 3, 11, 17, 19;

W 1/2 sec 15;

W ½ and NE ¼ sec 21. [837]

ALL OF THE RIGHTS hereby granted being nevertheless subject to any and all leases of and rights of way over any part or portion of said described premises heretofore made or granted by the party of the first part.

IN WITNESS WHEREOF, the parties hereto have caused their names and corporate seals to be hereto affixed, and these presents to be signed in duplicate on the part of the party of the first part by its Land Agent and Secretary, and upon the part of the party of the second part by its President and Secretary.

ву	COMPANY
AND	Land Agent.
KERN T	Secretary. RADING AND OIL COM
ву	PANY,
(Sig	ned) C. H. Markham, President.
AND	President.

Secretary.

SOUTHERN PACIFIC RAILROAD

Approved as to form. (Signed) Wm. F. Herrin. Chief Counsel. Description of Property correct. (Signed) E. T. Dumble. [838] STATE OF CALIFORNIA,) City and County of San Francisco.) On this.....day of....., in the year one thousand nine hundred and four, before me,..... a Notary Public in and for said City and County of San Francisco, State of California, personally appeared.....known to me to be the Land Agent, and known to me to be the Secretary of the SOUTHERN PACIFIC RAIL-ROAD COMPANY, the corporation that executed the within instrument; and each of them acknowledged to me that such corporation executed the same. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the City and County of San Francisco, State of California, on the day and year above written. Notary Public in and for the City and

County of San Francisco, State of Cali-

fornia.

STATE OF CALIFORNIA,)
: ss.

City and County of San Francisco.)

1110

On this.....day of....., in the year one thousand nine hundred and four, before me..... a Notary Public in and for said City and County of San Francisco, State of California, personally appeared.....known to me to be the President, and known to me to be the Secretary of the SOUTHERN PACIFIC RAIL-ROAD COMPANY, the corporation that executed the within instrument; and each of them acknowledged to me that such corporation executed the same.

> IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the City and County of San Francisco, State of California, on the day and year above written.

> Notary Public in and for the City and County of San Francisco, State of California." [839]

Q. By Mr. Mills-Was this attempted lease which I have shown you and which you identify as signed by Mr. Markham in your presence, the lease referred to by the various exhibits contained in the correspondence introduced yesterday and which were kept in that file?

A. Yes sir.

You state that you saw Mr. Markham sign that at the time?

A. Yes sir.

- Q. That is, on August 2nd?
- A. The 2nd of August.
- Q. Was that the time when you first understood that the execution of that lease, if it became known, would cause trouble in the land department, as referred to in this correspondence? Was that the first time you knew about it?
 - A. Yes; I was taken by surprise.
- Q. Did you have any extended conversation with Mr. Markham at that time?
- A. Only a few minutes; I was leaving the city that day.
- Q. Will you state the substance of your first conversation after you read the lease and understood its purport?
- A. I didn't read the lease fully at that time. I went to Mr. Markham's office. He sent for me and when I came in he had this document and merely said, "We are making a lease of certain lands in the Southern Pacific grant and transferring the oil leases to the Kern Trading and Oil Company" and he signed it right then. My recollection is that I merely glanced at some of the descriptions there and told him that I would have to look into that before I signed it, and I declined to sign it at that time. It was sent to my office during my absence.
 - Q. You left that day for Denver, did you not?
 - A. Yes. [840]
 - Q. That was on August 2nd?
 - A. August 2nd.
 - Q. After you arrived at Denver, did you get a

telegram from your assistant, Mr. George A. Stone, with reference to that attempted lease?

A. Yes.

Q. And is government's Exhibit FF a copy of that telegram?

A. Yes sir.

Q. I refer you to government's Exhibit GG.

A. That is my reply to it.

Q. Did you ever make any reply to Mr. Cornish as part of your duties as acting land agent as to the state of affairs in the land department?

A. Oh yes; frequently.

Q. What was the nature of those reports? What did you report on?

A. Everything. Very often he would call for specific reports.

Q. Did you ever have occasion to have knowledge that these reports were returned to other parties in San Francisco?

A. How is that?

Q. That any of your reports were returned to other parties in San Francisco. That is, other officials of the road?

A. Yes sir: I have known such things to be done.

Q. Reports that you sent to Mr. Cornish were sent back to other parties who were officials of the Southern Pacific Company?

A. Yes sir; I have known that to be done.

Q. Who were some of the officials that received those reports which you intended for Mr. Cornish?

A. I remember one case in which William F. Her-

rin turned [841] up with one of my confidential reports.

- Q. Which had been written to Mr. Cornish?
- A. On his order.
- Q. Do you know what the nature of that report was?
- A. I believe that that report that you are asking about—I don't know that you know excepting as to the general fact which I have testified to.
 - Q. That is all—
- A. —had nothing to do with the Land Department proper.
- Q. Mr. Eberlein, on August 2nd when you were in conference with Mr. Markham as to this attempted lease, you have stated that you declined to sign it?
 - A. Yes sir.
- Q. Had you known anything about the Kern Trading and Gil Company before that?
 - A. Nothing.
- Q. And you knew nothing about its purposes and organization?
 - A. Not a thing.
- Q. Will you state why you declined to sign that lease when Mr. Markham offered it to you?
- A. Because I saw in there the attempt to dispose of and convey lands that lie right in the region in which some of our selection lists—at least one of the selection lists—had been made.
- Q. Are you referring to the body of lands in 30-23?

A. Yes, I am. And those lands were not patented at that time.

Q. Did you inform Mr. Markham of that fact?

A. I may not have informed him at that time, but I informed him that I would take time to look into that lease.

Q. Why was it the fact that those lands lie right there [842] became important to you on August 2nd when he attempted to have you sign that lease?

A. I had made a non-mineral affidavit depending on the knowledge of my assistant who was a field man. I also had the direct backing of the government in making that non-mineral affidavit. That list of lands was made on my order, on the representation to me that it was non-mineral, by my assistant, who was fully informed.

Q. Your assistant, George A. Stone?

A. Yes.

Q. Before we get to that, did you communicate to Mr. Markham any of these facts at that time in that conversation?

A. Maybe not at that conversation, but I did in conversations later.

Q. And within the next few days or months?

A. Oh, within the next few months. The matter was up frequently. I was pressed to sign that lease over and over again.

Q. Do you know whether or not, Mr. Eberlein, any lease of lands belonging to the Southern Pacific Company was made to the Kern Trading and Oil Company during the time you were acting land

agent—any that was ever treated as a valid lease by the Kern Trading and Oil Company and officials of the Southern Pacific Company?

- A. Yes.
- Q. Is it a fact?
- A. Yes; it is a fact.
- Q. Why was it necessary for you to sign the lease?
- A. Because that was a part of the duties as laid down and prescribed by the board of directors of the Southern Pacific Railroad Company.
 - Q. In your appointment? [843]
 - A. Yes.
 - Q. The resolution appointing you?
- A. The acting land agent has been the responsible land officer of the road always, and up to that time he had always signed leases. In this case I was to take the responsibility for the railroad company myself. The president was not to sign it. The secretary was to sign, merely attesting the signature. But I was to be the goat, and I passed it.
- Q. When did you first learn that a lease had been executed by any officials of the Kern Trading and Oil Company or of the Southern Pacific Company, acting for the Southern Pacific Railroad Company, or any lease which was treated as valid, without your signature?
- A. This lease was spread by the auditor on his books, and treated as a lease without my signature.
 - Q. This very lease?
 - A. That very lease.

- Q. The lease which has been introduced in evidence here?
 - A. Yes sir.
 - Q. By what auditor?
 - A. C. B. Seger, who was then auditor.
 - Q. When did you first learn that?
- A. During the fall of 1904. Because we were importuned all the time to sign vouchers paying for pipage charges on that royalty oil of these different leases that were assigned or ever acknowledged at any time while I was in office.
- Q. Those piping charges were obligations on whom to pay?

A. They were obligations on the Southern Pacific Railroad Company to pay.

Q. Under some lease which had been spread on the books of the auditor of the Southern Pacific Company?

A. Yes sir. [844]

- Q. Had you ever seen that lease spread on the books?
 - A. No sir.

Q. Do you know whether in any way it departs from the form or description of the property contained in the leases already in evidence in this case?

A. I can only speak of the fact that the Land Accounts Bureau, in the auditor's office, acted upon it, and called on us for acts periodically which would give the right to charge the Southern Pacific Railroad Company with charges arising under the terms of that lease.

Q. Do you know specifically whether that lease which you have stated was spread on the books of the auditor of the Southern Pacific Company, contained other lands than the lands which are in this lease which is already in evidence?

A. I can't testify as to that.

Q. You don't know as a matter of fact whether it has additional lands or not?

A. No sir.

Q. Do you know whether that lease specifically contained the lands in this suit,—the lease which you have referred to as being spread on the books?

A. No sir. I have been informed that it did, but that is all.

Q. By Mr. Shoup—The lease that you are referring to and Mr. Eberlein is referring to is the lease to the K. T. O.? The attempted lease?

A. I understand that I am testifying about this lease without my signature.

Q. The attempted lease to the K. T. & O.

A. Yes sir.

Mr. Lewers—I move that his answer be stricken out as purely hearsay, that it does refer to this land, and as not the [845] best evidence.

Q. By Mr. Mills—When were you informed of that, Mr. Eberlein, that it does contain the land in this suit?

A. In the fall of 1904—no; I will qualify that. The information brought to me through the Land Accounts Bureau was that that lease, of which this is all there is—right here—that that lease they were acting upon and recognizing.

Q. When you say "that lease they were acting upon and recognizing", what lease do you mean?

A. I mean this uncompleted instrument right

Q. Which has been introduced in evidence in this case?

A. Yes sir.

Q. And you were informed of that in the fall of

A. Yes sir.

Q. About what month in the year 1904?

A. I can't testify as to that.

Q. Was it prior to November or October?

A. It was probably late in the year when these documents began to come in for our signature. Just what month, I can't pretend to tell you.

Q. I show you this paper, Mr. Eberlein, and ask you what it is, if you know?

A. That is a copy of a letter from Mr. E. E. Calvin addressed to myself, C. B. Seger and E. T. Dumble, jointly.

Q. Where is the paper from which that was copied—the original letter?

A. I don't know. This must be the copy that Mr. Calvin sent direct. It is dated September 26, 1907.

Q. This is the original, then?

A. Yes, so far as we are concerned.

Mr. Mills-We offer this in evidence.

Mr. Lewers-No objection. [846]

The letter last referred to and offered in evidence is marked "Plaintiff's Exhibit ZZ—L. L."

Mr. Mills-I will read this into the record:

"V-20-30-22

COPY

SOUTHERN PACIFIC COMPANY

December 26th, 1907.

Mr. C. W. Eberlein,

Acting Land Agent, Building,

Mr. C. B. Seger,

Auditor, Building.

Mr. E. T. Dumble,

Consulting Geologist, Building.

Dear Sir:

You will remember our inability to locate original or copy of lease to the Kern Trading & Oil Co. of lands in Kern River, McKittrick, Midway, Sunset and Coalinga Districts. As it is evident that all record of this document was lost in the fire, I have prepared substitutes and enclose for your files and information one copy of each lease from S. P. Co. to Kern Trading & Oil Co. covering above districts.

Yours truly,

(Sgd.) E. E. Calvin."

Q. Mr. Eberlein, this letter says, "As it is evident that all record of this document was lost in the fire, I have prepared substitutes and enclose for your files and information one copy of each lease from S. P. Co. to Kern Trading & Oil Co." Was that "S. P. Co." the Southern Pacific Company or the Southern Pacific Railroad Company?

A. He may refer there to a list of lands of the Southern Pacific Company.

Q. What is your recollection whether the substitute was [847] enclosed in this letter at the time?

A. I think there was a document enclosed.

Q. Do you recollect now whether it was in form and description the same as this lease or some other lease?

Mr. Lewers—To which we object on the ground that it is calling for secondary evidence concerning a document, and the document is the best evidence.

Mr. Mills—I want to fix in the record what is referred to.

A. All I can say is it was not recognized.

Q. The lease in evidence was never recognized by your department?

A. Nor was that that he refers to there.

Q. Never recognized by you?

A. No sir; not by me.

Mr. Mills-You may cross-examine.

A. There is one thing more, Mr. Mills. In the testimony of Mr. Stone yesterday, the imputation is left there in some way that E. T. Dumble inspired the making of that list. I want to go on record here to the fact that he did not, so far as I know. I did not know the man at that time.

Mr. Shoup-We intend to ask you about that.

A. All right.

Q. By Mr. Mills-In 1903 you didn't know him?

A. Yes sir. I didn't know him at that time.

Mr. Lewers-We expect to go very fully into that.

Whereupon the further taking of testimony herein was adjourned, to be resumed on June 1, 1912, at 10 o'clock A.M.

On Monday, July 1, 1912, at two o'clock P.M., at San Francisco, California, in the Federal Building, the further taking of testimony herein was resumed pursuant to stipulation [848] and agreement of counsel:

Mr. Mills—I want to ask Mr. Eberlein a few questions before I turn him over for cross-examination.

Mr. Lewers—At this time I would like to have the balance of the papers produced by Mr. Eberlein under the subpoena, a portion of which you have used in evidence, in order that I may examine them for the purposes of his cross-examination and for use in connection with it if I am so advised.

Mr. Mills—I will state that before we finish the direct examination we will produce all of the papers which were produced by the witness in response to the subpoena, excepting those with reference to which it would be necessary to lay the foundation which would properly entitle you to produce secondary evidence.

Mr. Lewers—Do I understand you will not permit me to examine papers which you have in your possession?

Mr. Mills—I don't know what you understand; I would like to make myself as clear as possible.

Mr. Lewers—As I understand, you will produce a portion of those papers and introduce them in evidence and you will retain the balance. Now, what you may be advised so far as the introduction of your testimony is concerned is of course up to you to determine; but what we want is the opportunity to examine these papers, and to use them in connection with the cross-examination if they have any bearing upon it, in order that this matter may be gone into entirely. And at this time I will state that before we get through this entire matter will be gone into and all matters of correspondence and documents and papers will be gone into, and we are perfectly willing to state, and desire to make this as emphatic as possible, that you may have anything and everything in our possession or that we can get that bears upon this in any [849] shape or form, provided you will extend to us the same favor as to papers which you may have in your possession or control that have any bearing upon this case. And I will state that by that I do not mean merely the balance of the papers produced by Mr. Eberlein; I mean other papers you have in your possession and control.

Mr. Mills—If I have any papers that you think will be of benefit to your case of which I am not now advised, you ought to know how to get them.

Mr. Lewers—I know that I cannot get them, because you claim privilege. You know perfectly well you are in a position where the government officials can claim privilege and prevent us getting certain documents which have a bearing on this case, or with reference to which we believe they will have a bearing upon it. On the other hand any document we have that you are so advised with reference to, you

can compel us to produce. But we are willing to relieve you of the necessity of doing anything of that kind if you will equally extend to us the courtesy of permitting us to see everything that you have.

Mr. Mills—Now, if you will specify what you want, I assure you you will be given it. If we have anything of value to you we will give it to you. At present I know of nothing.

Mr. Lewers—That is, you will be willing to produce anything we may specify that we think has a bearing on this case?

Mr. Mills—I will produce anything I have that I think will help the Southern Pacific Company; but I have not anything that I regard in that light.

Mr. Lewers—That is, you reserve the right to determine it yourself?

Mr. Mills—Will you resume the stand, Mr. Eberlein? I want to ask Mr. Eberlein a few questions before turning him over [850] for cross-examination.

Whereupon, CHARLES W. EBERLEIN was recalled and direct examination resumed, as follows: By Mr. Mills:

Q. On the concluding day of the testimony in chief, at page 1788 of the record of the reporter's transcript in this case, in response to a question by me: "Was that the first time you suspected that these lands might turn out to be mineral in character or might be mineral in character?" The copy of the transcript of your answer which was delivered to me reads: "I suspected them of being mineral in character?"

acter at the time I made that non-mineral affidavit."

Is that a correct statement of your testimony?

A. No; that is clearly erroneous.

Q. Now, the reporter has since then furnished me a copy which reads as follows: "A—I did not suspect them of being mineral in character at the time I made that non-mineral affidavit". Is that correct?

A. That is correct.

Mr. Mills—Let it so appear in the record, then, Mr. Examiner.

Mr. Lewers—That correction has already been made, has it not, Mr. Longley?

The Special Examiner-It has.

Q. By Mr. Mills—Referring to government's Exhibit TT, which is a letter addressed to Hon. W. D. Cornish, vice-president of the Southern Pacific Company, dated September 3, 1904, signed Charles W. Eberlein, acting manager, and appearing in the reporter's transcript at page 1773, I refer to this language: "This lease has been lying here for some time during my absence, and I may be called upon for it at any time. I would there-[851]-fore esteem it a great favor if you would give me any suggestion you may have by wire". What lease did you refer to in that letter?

A. Well, no lease, but this attempted lease that has been produced.

Q. That is, the lease that has already been introduced in evidence in part executed by Mr. Markham?

A. Yes sir.

Q. "I can stave off the delivery of this document

for some time yet, I think for the reason that if the knowledge of this lease becomes public property it will probably cause us a great deal of trouble in the United States Land Office, and may result in the loss of a large body of adjacent lands which may hereafter turn out to be mineral and oil-bearing. I found on taking charge of this office that a large body of our lands, especially indemnity lands in the Coalinga, McKittrick and Sunset fields had been withdrawn by the United States from entry, pending examination as to their mineral character. I have worked very hard and very steadily to get the United States to complete its report and dispose of this matter. I have just succeeded in getting the special agent in charge to make a report releasing our land from interdictment. If it becomes known that we have executed a lease of lands interspersed with those already under selection by us and that the lease is for oil purposes, it seems to me that it will immediately encourage oil speculators to file upon the lands so selected and that the government will have good ground for refusing patent, inasmuch as we practically fix the mineral status of the land by this lease." Did you ever receive in writing a reply to that letter of which I have quoted a small excerpt?

A. No sir. [852]

Q. Now, that was early in September, 1904. Did you have any occasion during that fall of 1904 to go to New York for a conference with Mr. Cornish, the addressee in that letter?

A. Yes. I was there late in the fall or early winter.

Q. Of 1904?

A. 1904.

Q. And did you have any conference with Mr. Cornish about the subject matter of that letter?

A. Yes sir.

Q. Now, will you relate, as nearly as you can recollect, what the substance of the conversation was with Mr. Cornish with respect to what I have read from that letter, Mr. Eberlein? Before entering upon that, may I ask you whether you took with you at that time this attempted lease which has been introduced in evidence and such correspondence as has also been introduced?

A. Yes sir.

Q. Saved by you from the conflagration of 1906?

A. Yes sir. This matter was taken up by Judge Cornish and myself and discussed at that time.

Q. Did you talk over that phase of the letter, specifically, which reads as follows: "If it becomes known that we have executed a lease of lands interspersed with those already under selection by us, and that the lease is for oil purposes, it seems to me that it will immediately encourage oil speculators to file upon the lands so selected and that the government will have good ground for refusing patent, inasmuch as we practically fix the mineral status of the land by this lease."

A. Yes; we discussed all phases of the matter,

and agreed as to the impropriety of a lease at that time.

Mr. Lewers—I move that that be stricken out and that the substance of the conversation be given—not the conclusion.

Q. By Mr. Mills—The lands referred to by you in that [853] letter, I believe you stated once, were the lands in suit in Township 30 South, Range 23 East, Mount Diablo Meridian?

A. I understand now the lands in suit are the lands covered by that selection list 89.

Q. Yes sir.

A. Yes sir.

Q. And those were the specific lands to which you referred in your letter and in your conversation which occurred with Mr. Cornish?

A. Must have been.

Q. Now, state, as nearly as you can recollect, what conversation you had with Mr. Cornish about the execution of that lease?

A. We took this matter up with all the papers; looked them through, and I asked him what he wanted done with them, and he was very positive in his instruction that I was not to sign it or to recognize it. He considered it an improper lease to be made, having reference to the selection list of lands in the immediate neighborhood. He furthermore told me that I was to keep all those papers in my own possession, so that they might not be in the office where they might be considered as going where any-

one would have any knowledge of the document, so that it could not be acted upon in some way during my absence; that is, he particularly cautioned me against the approval of those vouchers, which were beginning to come in at that time for pipeage.

Q. Well, did he, at that time, instruct you positively to keep the papers which have been introduced, constituting the correspondence between yourself and other officials of these roads, and have them filed separately from the other files of the Land Department of the Southern Pacific Railroad Company?

A. His instruction was that I was to keep those to myself. [854] He said they might hereafter be necessary for my protection. They have been kept by me ever since.—And incidentally for his own protection.

Q. Did you and Mr. Cornish at that time recognize any trouble which might arise in the future from the making up there of those documents?

Mr. Lewers—To which we object, on the ground it calls for the conclusion of the witness, and it is leading and suggestive.

Mr. Mills-You may state it in your own way.

A. We naturally recognized at least the very ambiguous position in which we would be placed, both of us, by that lease, if that lease were made—and especially if I made the lease, I having also made the selection list which was at that time unapproved,

Q. That is, it had not gone to patent?

- A. It had not gone to patent. It had been approved but not patented.
- Q. And in support of that selection list referred to by you which has been introduced in evidence, you had made the usual non-mineral affidavit, testifying under oath that the lands, so far as you know, were non-mineral in character?
 - A. Yes sir.
- Q. Now, did the fact that you had made that nonmineral affidavit, and the further fact that the lands were in process of administration in the Land Department of the United States, and no patent having issued, give you notice of the trouble which would ensue if you executed that lease?

Mr. Lewers—To which we object, on the ground it is leading and suggestive in the extreme. The witness is a very intelligent witness and is quite able to tell what took place and what was the purpose in his mind without being coached by [855] counsel.

A. I don't know as I understand that question exactly; but I simply state, as I have already stated, that the fact that I had made a non-mineral affidavit covering a large selection list, in perfect good faith, believing the fact to be as set forth in that non-mineral affidavit, it didn't seem good policy, to say the least for me to turn around and make a lease of lands which were in juxtaposition to these same lands, and I believed, and Judge Cornish believed thoroughly, that it might give rise to trouble.

- Q. By Mr. Mills—Now, what trouble would you expect from that, and what trouble did you have in mind?
- A. Naturally would expect that if the lease was made at that time, with those lands mixed up as they were, or adjacent, that the government of the United States, having in mind that they were very active about that time in nosing into everything that affected railroad lands, would be very apt to call that lease at least in question, and make effort, at least —or hold it up or entirely knock it out.
- Q. In other words, to completely preclude the possibility of the Southern Pacific Railroad Company acquiring title under that list?
 - A. Yes, very probably would.
- Q. Now, you spoke of the juxtaposition of certain lands embraced in the lease referred to by you to those which were embraced in the selection list?
 - A. Yes sir.
- Q. The lands which were in the lease and contemplated by the maps accompanying the lease were to be leased to the Kern Trading and Oil Company, as I understand it?
 - A. Yes sir.
- Q. And those lands were interspersed with the lands which [856] were embraced in the selection list in support of which you made the non-mineral affidavit? Am I correct in that?
 - A. Yes sir. That is my understanding.
 - Q. Now, in your discussion with Mr. Cornish at

that time did he say anything to you about or caution you in any way about having your assistants instructed as to any recognition to be given to the lease?

A. Yes.

Q. Will you state what that was?

A. He gave me very particular instructions about having that known to just as few as possible in the office—thought it was best—and that they be instructed as to what to do in all cases; that they were not to act, but refer all questions to me that might arise, or to him.

Q. Now, the papers to which you have referred as having been the subject of that instruction were government's Exhibits EE, FF, GG, HH, II and so on down to ZZ?

A. No.

Q. Excepting what?

A. Only those that were in existence at the time of the conference.

Q. I say, excepting those which appear to have been written before that time?

A. After that time.

Q. But what I mean to say and what I meant to intend by the question, was that all of the papers referred to by Mr. Cornish are included in some of these exhibits?

A. Oh, yes; but only such as were in existence at the time of the conference.

Q. Was there any attempt, to your knowledge, subsequent to that conversation, to put through any

vouchers for piping charges by the Southern Pacific Railroad Company, or against [857] the Southern Pacific Railroad Company?

- A. Yes sir.
- Q. When, and under what circumstances?
- A. Well, I believe they were rendered monthly.
- Q. Yes. Explain the nature of those piping charges.
- A. The lease, as I remember it, provides for the payment by the Southern Pacific Railroad Company, of the charge for pipeage of the royalty oil, and that was to be paid on voucher, and those vouchers were rendered by the auditor every month.
 - Q. When did you first receive notice of that?
- A. I think in the fall of 1904. I can't fix the date, but it was in the year 1904 I am very sure.
- Q. Did you ever recognize those vouchers in any way?
 - A. No sir.
- Q. And solely because of your refusal to execute the lease?
- A. My refusal to execute the lease and by order of my superior officer.
- Q. Mr. Cornish at that time was vice-president of the Southern Pacific Company, with offices at 120 Broadway, New York, was he not?
 - A. Yes sir.
 - Q. What other office did he hold at that time?
- A. Well, in my testimony I said that I didn't know whether he was connected with the Southern

Pacific Railroad Company. I have thought that ever since, and though I cannot fix it absolutely I believe that he was the president of the Southern Pacific Railroad Company at that time and up to the time of his death. That is subject to correction, but I believe that to be the fact.

Q. As well as the vice-president of the Southern Pacific Company? [858]

A. Yes.

Q. Now, you state that you had received no reply to the letter marked government's Exhibit TT, dated September 3, 1904, by Mr. Cornish. Did you at any time ask him why he did not reply to that letter?

A. No; I don't think I did. I talked to him about the letter.

Q. Did he give any reason for not replying to that letter?

A. No, he did not.

Q. You had asked for telegraphic reply, I see?

A. Yes.

Q. Now, subsequent to that conversation you returned to San Francisco. Did you take any action, under those instructions, as to the segregation of those papers?

A. Yes sir, I did. I kept them very carefully.

Q. And what did you do in that respect?

A. Well, I put them in a safe deposit vault.

Q. What safe deposit vault did you put them in?

A. California Safe Deposit & Trust Company.

They were kept there—taken in and out, but that was where I aimed to keep them. Kept them there for the protection of both the railroad company and myself. A part of them were in the office of the company at the time of the fire, in a private safe we had there. I think that my assistant had access to it, and I had access to it, and these carbonized remains are what were taken out of that safe.

- Q. Who were your assistants at that time?
- A. Mr. George A. Stone was assistant.
- Q. When did Mr. Conlin become assistant?
- A. Either late in 1906 or—probably not until 1907. I can't remember.
- Q. The Mr. Stone you refer to is the Mr. George A. Stone who [859] testified in this case?
 - A. Yes sir.
- Q. Do you know, Mr. Eberlein, what powers Mr. Stone had with reference to the land affairs of the Southern Pacific Railroad Company while acting as your assistant?

Mr. Lewers—Objected to as having been gone into very fully heretofore.

Mr. Mills—I expect to go into it more fully this time.

A. He had the powers testified to the other day; that is, he had powers enough to fully run the affairs of the department during my absences, which were frequent and long continued. He of course had dictated and signed letters, signed vouchers, payrolls; did everything, in fact, that I could do, except such acts as were limited to me by my appointment.

- Q. Now, he was assistant to you at the time you first were appointed as Land Agent?
 - A. Very shortly afterwards.
- Q. Had he been in the office of the Land Department prior to your arrival there?
 - A. Yes.
- Q. How long a period of time would you be away from the office at any one time during the period when he was assistant?
- A. Oh, three to four months sometimes. I was in New York frequently and spent possibly half the time there.
- Q. Well, you came to the Land Department, I believe you testified, some time in 1903?
- A. No; I came to the city—oh, you mean some time in 1903?
 - Q. Yes.
 - A. Yes; August, 1903.
- Q. At that time had you any knowledge of the base lands in the location of the indemnity main line grant of the [860] Southern Pacific Railroad Company?
 - A. When I went into the office?
 - Q. Yes.
 - A. No; I had no knowledge of them at all.
- Q. How soon after arriving there was it that the selection list of these lands was first made?
- A. I think it was made that same month—August.
- Q. Who prepared that selection list and when did you first learn of it?

- A. It was prepared by Mr. Stone. He had charge of all that work all the time he was in the department while I was there.
- Q. Mr. Stone has testified that one E. T. Dumble, a consulting geologist of the defendant Southern Pacific Company, came into the office and for reasons best known to himself pressed the selection of these lands in suit. Do you know anything about that?
- A. Why, I have no recollection of Mr. Dumble having had anything to do with it, that list or any other list.
 - Q. All you remember of it, then, is what?
 - A. I don't remember any of it.
 - Q. I mean to prepare the selection list?
- A. Simply the authorization of Mr. Stone to make selection of lands and my execution of that list.
- Q. Did Mr. Stone present the list to you for your signature?
 - A. Yes. He had to.
- Q. Did you have at that time any knowledge of the base lands contained in that list?
 - A. No. I knew nothing about it.
- Q. Did you know anything about the other lands —their character or anything else?
- A. Oh, no; I didn't know anything at all about the [861] department at that time.
- Q. Well, then, this list was presented to you, I understand, for your signature, by Mr. Stone?

- A. Yes sir.
- Q. And was prepared by Mr. Stone?
- A. Yes sir.
- Q. And everything you were required to do, as acting land agent, was to execute the application and the affidavit?
 - A. Yes sir. That was limited to me.
- Q. Did you have any talk with Mr. Stone when he presented the list?
- A. I had nothing more than to inquire as to the non-mineral character, inasmuch as I had to make the affidavit.
 - Q. Of whom did you make that inquiry?
 - A. Mr. Stone.
- Q. And he was the only man you talked with about it.
 - A. Yes.
 - Q. And what did he say about it?
 - A. He said they were not mineral.
- Q. And on that you executed the non-mineral affidavit?
 - A. Yes sir.
- Q. Did you send out anybody at that time to make any examination of the lands?
- A. No sir, I didn't do it. I didn't consider it necessary. Stone was familiar with the land—claimed to be.
- Q. Well, he was familiar generally with the location of the entire ground, wasn't he?
- A. Well, I understood that he had been through this country, knew the lands.

- Q. Now, had you at that time, or since—at any time—acquired any knowledge further than the knowledge which was given you by Mr. Stone, of the character of those lands, on the [862] occasion you have mentioned?
- A. Personally I know no more about those lands now than I did then.
- Q. Now, after that lease was made, Mr. Eberlein, did you subsequently, when you became more accustomed to the office, make any detailed examination of the lands that were embraced in subsequent lists?
- A. We instituted a systematic examination of lands after that.
 - Q. After that time?
 - A. Yes sir.
- Q. But at the time this list was presented by Mr. Stone you were somewhat green in the business of the Southern Pacific Railroad Company's land grant?
 - A. Yes.
- Q. And were unfamiliar with the location or character of any of the lands?
 - A. Yes sir.
 - Q. Is that correct?
 - A. That is true.
- Q. Did you ever have any discussion with Mr. Dumble after the offer was made that you execute this lease known as government's Exhibit YY, respecting his activities in examining lands not yet patented to the railroad company?

A. I don't remember a discussion with Mr. Dumble. I know I made protests in writing to him; but the discussion was had with other people—not with Mr. Dumble.

Q. Well, with whom?

A. Well, the matter was discussed with Mr. Kruttschnitt, Mr. Cornish and Mr. Markham, as I remember it.

Q. Beginning about what time? That is, what year?

A. It began in this year of 1904. [863]

Q. Right after this lease was proposed?

A. Yes; I think about that time.

Q. Well, what was the subject of that discussion? Did you ever make any protests, in any of those discussions, against the examination of lands by Mr. Dumble?

A. I objected to Mr. Dumble's examination of unpatented land without any reference to the department, for the reason that I was fearful that it might charge us with notice of the mineral character of the lands. Mr. Dumble didn't give us any information at all—never did—I didn't co-operate in any sense at all—and I heard or had reason to believe that a good deal of examination was going on of granted lands, and such of those as were unpatented and believed that it was very bad policy to examine before patent issued, especially without any reference to the land office.

Q. Now, on this lease which is marked govern-

ment's Exhibit YY, it appears that the name of E. T. Dumble is endorsed under the statement "correct as to description." That lease was dated August 2, 1904. Did you know at that date that Mr. Dumble was consulting geologist in the employ of the Southern Pacific Company?

A. I think so.

Q. What did that endorsement of Mr. Dumble's signature "Correct as to description" convey to your mind at that time?

A. Well, it was a surprise to me. I didn't know that Mr. Dumble knew anything at all about the grant of lands to the company; and in my letter to Mr. Markham, which is already in evidence, I called attention to errors in that list of lands which might have been avoided if the land department had been consulted about it. There were some errors such as the inclusion of lands entirely outside of the grant, that we had nothing to do with so far as we knew, and of course my [864] signature as land agent would not have been effectual at all to transfer any title to such lands-had no jurisdiction over them at all. There were a few errors of that kind, and from that time on the matter was pretty unpleasant; there were frequent clashes between the consulting geologist's office and the land department by reason of the fact of their insistence upon many things which in my opinion they had nothing to do with as they had no responsibility for it, and, as far as I knew, had no knowledge of it.

- Q. How was Mr. Dumble's activity with reference to unauthorized examinations of lands not yet patented brought home to you?
 - A. Well, I don't understand that exactly.
- Q. Well, were there ever any demands made upon you for lists by Mr. Dumble?
- A. Oh, yes, yes; frequent demands for lists, and for lands. One demand was made in which, as I remember it, it was stated that they had frequent calls for granted lands and he wished to be advised fully so that they could answer all inquiries. And I replied to them that if they had any such inquiries about the granted lands of the company there was only one office that had any right to mix up in it or give any information, that the land department was responsible and if he had any such inquiries he could refer them.
- Q. Did Mr. Dumble ever, prior to 1904, offer to you personally any of his expert knowledge which he had gained in the granted lands of the Southern Pacific Railroad Company as to the mineral or non-mineral character of those lands?
 - A. Prior to 1904?
- Q. Prior to the date of the patent, in December, 1904?
 - A. No; I think not. I don't think so.
- Q. Mr. Stone has testified that Mr. Dumble came in in 1903 to the office of the acting land agent of the Southern Pacific [865] Railroad Company, and for reasons, as he says, best known to himself, pressed

the selection of the very lands in suit. Have you any reason now to deny the truth of that statement, so far as you personally know?

Mr. Lewers—I object to the question, on the ground it assumes something in evidence which is not in evidence; that that is not a fair statement of Mr. Stone's testimony. Mr. Stone says he was under the impression that that had happened.

Mr. Mills—I will let the record speak for the correctness of my statement.

A. I don't think I would want to put it in that way—"deny the truth of Mr. Stone's statement."

Q. You may state it any way you please.

A. I can only say I have no recollection of Mr. Dumble having been in there in regard to that list at that time.

Q. You personally have no recollection, and he never came to you?

A. I don't think he ever came to me. I don't think I knew the man at that time. I have no recollection of him.

Q. Do you know whether he went to Mr. Stone as Mr. Stone has stated?

A. No; I don't,

Mr. Lewers—You know, Mr. Mills, Mr. Stone didn't state that Dumble went to him in connection with the matter. That is not a fair statement.

Mr. Mills—I don't mean to mis-state the record, and I will let the record stand as against my statement. I think I have quoted it correctly.

Q. Do you know whether Mr. Stone had access to this separate file which you have referred to, at any time after the papers were segregated and kept separately?

A. Oh, yes; he had access at all times. He had the file, [866] copied file, left with him when the papers were taken to New York.

Q. I show you this, Mr. Eberlein, and showing you this paper marked for identification AAA, what is that, if you recognize it?

A. That is a telegram from George A. Stone to me, dated December 27, 1907, addressed to me at 120 Broadway, New York.

Q. Is this the identical telegram that you received at that time?

A. Yes sir.

Q. Will you please read this translation and say whether that is a correct translation of the telegram?

A. Yes sir; it is.

Mr. Mills—Inasmuch as the exhibit AAA is in secret cipher and as the witness has testified that the translation which I shall offer is a correct translation, will you gentlemen stipulate the translation may be received with equal force as if the original itself were introduced?

Mr. Lewers-Oh, yes.

Mr. Mills—Then this translation is offered in evidence.

Mr. Lewers-No objection.

Mr. Mills—Then let this be admitted as government's Exhibit AAA.

Mr. Mills—I will read this into the record: "San Francisco, December 27, 1907. Charles W. Eberlein, Care Wm. D. Cornish, 120 Broadway, New York, N. Y. Have received from E. E. Calvin copy of lease from S. P. R. R. Co. to Kern Trading & Oil Co. of lands described in list which you have. Executed Dec. 12, 1907. Description approved by E. T. Dumble. Geo. A. Stone."

The telegram last referred to and offered in evidence is [867] marked "Plaintiff's Exhibit AAA—L. L."

- Q. I show you this letter, Mr. Eberlein. You may state what it is.
- A. That is a letter from Henry Conlin, who was my assistant, dated December 27, 1907, and addressed to me at 120 Broadway, New York.
- Q. This letter appears to be dated the same date as the telegram translation, and he says, "I inclose you translation of telegram."
 - A. Undoubtedly the same.
 - Q. This is the one that was inclosed?
 - A. Yes sir.
- Q. That is, that Exhibit AAA was enclosed in this letter?
 - A. Yes sir.
 - Q. Do you know Mr. Conlin's signature?
 - A. Yes sir.
 - Q. Is that his signature?
 - A. That is his signature.

Q. Did you receive that letter in due course of mail?

A. I did.

Mr. Mills-Offer this letter in evidence.

Mr. Lewers-No objection.

Mr. Mills—The letter which transmitted that exhibit reads as follows:

"San Francisco, Cal., December 27, 1907.

Mr. Charles W. Eberlein, C/o

Hon. Wm. D. Cornish,

120 Broadway, New York, N. Y.

Dear Sir:-

I inclose you herewith translation of telegram sent you to-day regarding execution of leases by Southern Pacific Railroad Company to Kern Trading & Oil Company. [868]

You have in your possession a list of the lands embraced in these leases. You also have a map of these same lands, with colors showing status of title.

I also inclose you copies of the leases.

As you will note, Prof. Dumble has approved the descriptions, but there are a great many tracts described which, according to our records, are not owned by the company.

Yours truly,

Henry Conlin,

Ass't to Acting Land Agent."

The letter last referred to and offered in evidence is marked "Plaintiff's Exhibit BBB—L. L.

Q. I show you this letter, Mr. Eberlein. Please state what that is.

A. That is a copy of a carbon copy, apparently, addressed by E. T. Dumble to C. B. Seger, auditor, August 8, 1906.

- Q. And what do the letters "CC to CWE" mean?
- A. "Carbon copy to Charles W. Eberlein."
- Q. So that you received a carbon copy of a letter from Mr. Dumble?
 - A. Yes sir; this is a copy of that carbon copy.
- Q. What became of the original carbon copy that you received?
- A. I think it must be still in the office. This is dated—

Mr. Mills—Have you any objection to the introduction of this?

Mr. Lewers-No.

Mr. Mills-We offer it in evidence.

Mr. Lewers—I suppose it is offered merely with reference [869] to the lands referred to in the lease. Of course it has nothing to do with Coalinga.

Mr. Mills—I will read this into the record:

"(5-21-06-1M)

Form 5746 B.

(Copy)

KERN TRADING AND OIL COMPANY.

E. T. Dumble,

In reply Refer to No.

Vice-President and

General Manager.

Oakland, Cal., August 8, 1906.

Mr. C. B. Seger,

Auditor,

City.

Dear Sir:-

Please be advised that the lease on Section 25, Township 20, South Range 14 East, Coalinga, formerly operated by Corey and Canfield under lease G-77 originally leased to Smith and Bryner, having been forfeited, the Kern Trading and Oil Company will operate the property under the general lease which it holds covering this land and paying as royalty one-tenth of total production.

Yours very truly, (sgd) E. T. Dumble.

ETD

CC to CWE"

Copy of letter last above referred to and offered in evidence is marked "Plaintiff's Exhibit CCC— LL."

Q. By Mr. Mills—What is this paper I hand you?

A. That is a copy of a carbon copy of a letter addressed by E. T. Dumble to C. B. Seger, Auditor, August 8, 1906. The carbon copy was sent to me.

Q. That is to say, one copy went to Mr. Seger and one to [870] you, from Dumble?

A. The letter was addressed by him to Mr. Seger and the copy sent to me.

Q. By Mr. Dumble?

A. Yes; by Mr. Dumble.

Mr. Mills-This is offered in evidence.

Mr. Lewers-No objection.

Mr. Mills—I will read this into the record: 89 G—

"(5-21-06-1M)

COPY

Form 576 B

KERN TRADING AND OIL COMPANY.

E. T. Dumble,

Vice-President and

General Manager In reply Refer to No.

Oakland, August 8, 1906.

Mr. C. B. Seger,

Auditor,

City.

Dear Sir:-

Please be advised that the lease on Section 31, Township 19 South, Range 15 East, Coalinga, formerly operated by the El Capitan and affiliated oil companies under lease G-20 having been forfeited, the Kern Trading and Oil Company will operate the property under the general lease which it holds covering this land and paying as royalty one-tenth of total production.

Yours very truly,

TED

(Sgd) E. T. Dumble.

CC to CWE

(The following written in ink:)

G.A.S.

compared by J.E.A.

Aug. 22-06

This copy made and attached to this file to show Mr. Dumble's [871] understanding about execution of lease to Kern Trading & Oil Co. This office has no information that said lease was ever executed G.A.S."

The copy of letter last above referred to and offered in evidence is marked "Plaintiff's Exhibit DDD-L.L."

Q. By Mr. Mills—Whose handwriting is this in, Mr. Eberlein?

A. That is the handwriting of Mr. George A. Stone.

Q. Do you know what these figures appearing here mean, "Form so and so"?

A. No. That probably is the stationer's mark.

Mr. Mills—Now, Mr. Lewers, you called for all the papers which Mr. Eberlein produced under that subpoena. They have all been introduced with the exception of these two papers and three or four maps pertaining to lands outside of the McKittrick district, in connection with that deed.

Mr. Lewers—Haven't you any letters earlier than August, 1904?

Mr. Mills-Was that the earliest introduced?

Mr. Lewers-Yes.

Mr. Mills—No. Having shown my good faith in the matter, and based on your promise to produce, we now formally ask you to produce the lease dated December 12, 1907, executed between the Southern Pacific Railroad Company, defendant, and the Kern Trading and Oil Company.

Mr. Lewers—I will produce them, but I have not them with me now.

Mr. Mills-When will you produce them?

Mr. Lewers-I think in the morning-that is, bring

you a copy. I don't know whether I have the original or not.

Mr. McCormick—We also ask you to produce the lease men [872] tioned in the two letters which have just been introduced in evidence and marked respectively "CCC" and "DDD", designated therein as "The general lease which the Kern Trading and Oil Company holds in Coalinga," in the one instance and "general lease which the Kern Trading and Oil Company holds" in the other.

Mr. Mills-You may cross-examine.

CROSS-EXAMINATION OF CHARLES W. EBERLEIN

By Mr. Lewers:

Q. Mr. Eberlein, I show you a card, and ask you if you know what that is or by whom it was prepared?

A. That may have reference to something in the land department, but I can't identify it.

Mr. Lewers—I ask that this be marked for identification "Defendants' Exhibit No. 1."

The card last referred to is marked for identification "Defendants' Exhibit, No. 1—L. L."

- Q. You came to San Francisco in June, 1903, did you not?
 - A. I think so.
- Q. So that when you said August a few moments ago as your date of arrival it was inadvertent?

- A. That is a mistake. I took possession of the office in August.
- Q. And when you first came here you were engaged in independent work in connection with the plan of reorganization, were you not?
 - A. General investigation. [873]
 - Q. Where were your offices at that time?
 - A. I think at the Palace Hotel.
 - Q. That is, you made the hotel an office?
- A. Yes; I had no office that I remember. None had been furnished to me.
- Q. Do you remember the number of the room that you used as your office?
 - A. No.
 - Q. Was it room 71?
- A. No. 71, I think—this is simply my recollection. 71 I think is the room in the old Wells-Fargo Building. That was the office of the Southern Pacific Railroad Company.
- Q. And that is where you were for a time after you became acting land agent? Is that the fact?
- A. Yes; we were there until the offices were removed over to the Merchants Exchange.
- Q. You moved first to the offices of the Southern Pacific Railroad Company when you were appointed acting land agent, did you not?
 - A. I simply took charge in that office.
- Q. And at that time did you discontinue the other work which you had had on hand for the time being?
 - A. Well, now, if you mean the general work of

the reorganization, it would necessarily interrupt it by having to take hold of a lot of detail with which I was entirely unfamiliar.

- Q. You were, however, familiar with the land grants of railroads in general, at that time, were you not?
- A. I had been informing myself for the month preceding.
- Q. And you had at that time some experience in the Union Pacific Company as to the method of handling railroad land grants? [874]
 - A. Yes.
- Q. So that it was not entirely a new matter with you?
 - A. Oh, no.
- Q. And it was merely that you were unfamiliar with the particular details of the land holdings of the Southern Pacific Railroad Company?
 - A. Yes sir.
- Q. But in the broad sense you were quite familiar with the entire subject, were you not?
- A. I had pretty good information as to land grant systems in general. They differed, of course, but the idea was to evolve for this coast one as nearly as possible a uniform system.
- Q. In fact you had informed yourself as fully as possible in order to undertake this plan of reorganization?
- A. I was informing myself at the time. There were three grants here to be overhauled, and it was a very large contract.

- Q. That is, the Central Pacific, Southern Pacific Railroad and the Oregon?
 - A. Oregon and California.
- Q. And your intention, when you first arrived, and until Mr. Kruttschnitt requested you to take over this other work, was to be devoted entirely to that line or plan of reorganization?
 - A. Yes sir.
- Q. In doing that did you have access to the company's various offices, all of them?
 - A. Yes.
- Q. You came here with authority to look into any details in any of those offices you could get or wanted?
- A. Call for any information. That was my understanding.
 - Q. And did you have a force assisting you?
 - A. No, I had not at that time. [875]
 - Q. That is, it was individual work chiefly?
- A. The general plan was, by interviews with the land offices, to discover and call for different things. One thing was to find their method of doing business. Mr. Kruttschnitt or Mr. Harriman was anxious to have a uniform system and make a consolidation. That was the object of it.
- Q. And your purpose in coming here was to acquire a sufficient knowledge of the details so as to recommend a method of consolidation, was it not?
 - A. To try to consolidate.
 - Q. Now, in doing that work, prior to the time Mr.

Kruttschnitt requested you to take over the Southern Pacific Railroad Company's grants, did you make any investigation as to the amount of land that was available for selection in any of the grants?

A. I called, I think, for information to show what the general condition of the land was as to patent and other items.

Q. And did you make any examination or investigation during that period prior to August, 1903, with reference to indemnity lands?

A. I don't remember; but I presume I did endeavor to inform myself as to the grant of lands that were lost and the amount of the indemnity lands that were available.

Q. Now, was there any limit to the indemnity lands that were available at that time?

A. Now, as to that I am speaking from recollection. I have nothing before me or at hand by which I can tell.

Q. In a general way, I mean.

A. There was a distinction between the main line and what was known as the branch line grant. The main line grant, as I remember it, had about 50,000 acres of base land, that is, main line lands lost, for which no indemnity had been selected. [876] That is my recollection, and I don't think that there was enough surveyed indemnity unselected at that time to indemnify the road for the loss.

Q. Well, was it not also a fact you discovered in your investigation, that considerable portions of this indemnity land that could be selected had been located and selected by individuals, so that it was lost to the company?

A. I remember, now that you call my attention to it, I think there was something like 150 cases where indemnity had been settled upon by unauthorized people, as the railroad supposed, the railroad relying upon the terms of its grant, on the understanding that the indemnity was theirs until it was selected, that the indemnity was set aside to the railroad company the same as the grant; but the Secretary of the Interior held the contrary to that contention.

Q. Do you remember when that holding was made, generally?

A. It was before I came here. The reason I remember that now is I have a recollection, about the time you refer to, Judge Singer calling my attention to a record which was in his office. It was a book in which was set down the names and the condition to the titles of about 150 cases, as I remember, where it had been attempted to eject those people by process under the laws of California by reason of their being on indemnity land, the attempt being made by the railroad company to select indemnity, and they were defeated by this decision I speak of in those cases.

Q. So that, by reason of that decision, there was lost, from the railroad standpoint, a very considerable amount of indemnity land?

- A. Yes sir. It was a very burdensome decision, and an unjust one it has always seemed to me.
- Q, And that also gave you the impression at that time, did [877] it not, that there would be danger of losing further indemnity land in the future?
 - A. Yes sir.
- Q. Now, when you assumed the duties of your office as acting land agent—which you say was some time about the first of August, was it, in 1903?
 - A. To be exact, I think it was the 12th.
- Q. That is, you took over the actual work of the office before this resolution of the company was adopted?
 - A. Yes; about a month before.
- Q. Now, at that time did you have in mind the possible loss of this indemnity land?
 - A. Yes sir.
- Q. And was that one of the matters to which you directed your immediate attention?
- A. Yes; I think it was one of the first things I paid attention to.
- Q. And was not that your main reason for directing Mr. Stone to make up this list No. 89†
- A. My recollection of that whole situation was that my object here, as I supposed when I came out, was the same as it was on the Union Pacific. I reorganized that land grant and put it in shape to sell and did sell it; sold it out very rapidly. But when I came onto the Southern Pacific I found a condition that was entirely foreign to anything that I had

known of before that time or had even supposed were possible. I refer now to some-well, five or six, perhaps, suits brought by the United States on different grounds involving, in two or three cases, overlaps between the old Atlantic and Pacific grant and that of the Southern Pacific, the main line and the branch line, which was a very complicated condition; and I found that by far the larger part of the available lands [878] or lands which might come into market were tied up in those suits, so that the lands that might be available for selling purposes were very few indeed. There was a large amount of land subject to defaulted contracts, and they could only be recovered and made salable by appropriate proceedings, such as foreclosure, as I take it; for, as I was advised, I think by Judge Singer, that after four years default all we could do under our contract was regular foreclosure. That being the case, my recollection in this case is that the lands through this section, and including these lands in these townships which are covered by that selection list 89, had been only a short time before surveyed, and they became selectable, and it was my plan to select promptly so as to save everything that was possible to the company.

Q. It is a fact, is it not, that part of the survey of this Township 30-23 was filed in the local Land Office at Visalia in the month of May, 1903, just before you came here?

A. My impression was it was some time in the spring. I know I could not understand why they

hadn't selected it at once. It was always the plan in the department in my time to immediately get after indemnity as soon as there was a survey made.

Q. And having that in mind you directed the immediate preparation of this list, did you not?

A. Yes sir, I did.

Q. And you directed Mr. Stone to prepare it?

A. Yes sir. Mr. Stone was familiar with all the details.

Q. And did you, in connection with that, make any inquiries of him as to the character of the land?

A. Just a general inquiry, when I made the affidavit, as to whether there was any of it mineral.

Q. And he informed you he had been over the very ground [879] in question, did he not?

A. I believe so. It was my understanding that he was familiar with the ground, and that they were not mineral.

Q. Mr. Stone had been a land grader, had he not, for the company?

A. Yes sir.

Q. A land examiner?

A. He had been the examiner for a number of years.

Q. Up to the time you made him your assistant he was a land grader, was he not?

A. Yes sir.

Q. So that, when you signed the affidavits which were attached to this application, you did so in good faith and believed fully that they were stating the absolute truth, did you not?

- Q. And you had no information or intimation
- A. I think so.

from any other source to the contrary?

- A. I think not.
- Q. Now, the first affidavit to which you swore in this matter was signed some time in the fall of 1903, was it not?
- A. My impression is that it was earlier than that. I think it was in the latter part of August.
- Q. Well, you signed an affidavit, which is in evidence, on August 31, 1904, to rearrange list 89?
- A. Oh, that is a matter that had entirely slipped my mind until brought up here in the hearing. I don't have any recollection much about that rearrangement. The only thing I do recollect is the return of the original list after it was filed.
- Q. This may refresh your recollection: Did you not sign the original affidavit on November 7, 1903? [880]
- A. Now, I could not swear as to the date. I would think that it was earlier than that; but if that is the date on the document that must be the correct date.
- Q. Now, after you had prepared selection list No. 89, as you have described, what was done with the list by the local land office at Visalia when you sent it down there?
 - A. It was returned.
 - Q. Why was it returned?
- A. With the information that a general with-drawal—a suspension order, I think they called it,—

covered all the unappropriated land in Township 30-23 and a number of others, I think six or seven townships. It was a blanket withdrawal of everything, because—I didn't understand it was because of any discovered mineral, but because of the mineral excitement, probably, in the neighborhood in there somewhere in that part of the country.

Q. That is, did that order, when you learned of it, convey to your mind any belief that this was actually mineral land?

A. No; it did not. I talked with Mr. Stone; I don't know whether anybody else; and from my talk with Mr. Stone and the extent of that withdrawal the impression on my mind was that it was just one of those things, a sort of drag-net affair and there might or might not be mineral in any of that territory. There had been none found, so far as I know.

Q. That is, your understanding was that there was a very broad withdrawal and included good, bad and indifferent?

A. Yes. It was one of those hastily done things that didn't mean that the land was mineral. It only meant to tie it up so as to prevent any form of disposition until I don't know what. I don't know that the government as early as that went to the trouble of making any such investigations as they make now. I am inclined to think not. [881]

Q. Now, after the application was rejected by the Visalia Land Office on the ground of this withdrawal what was done with it?

A. Why, it came back to the office, and my impression being that it was probably something that required only action by the government to release, or release in part, I made application to the Secretary of the Interior, through our representative in Washington, to have a representative of the Department make an examination of these lands covered by our list.

Q. By Mr. Mills-Was that in writing?

A. Well, my letters were to Mr. Chambers.

Mr. Mills—We shall object to any of that unless the original is produced.

Q. By Mr. Lewers-You may proceed.

A. Well, the fact is that through Mr. Chambers I succeeded in having a man detailed to make that examination.

Q. Do you know who that man was?

A. His name was Ryan. That is my recollection. I never saw him, never had any communication with him; but he was sent into the field and did make an examination and reported. My request was that the government make such an examination as to determine which of the lands we had selected were mineral and that as to the rest we should be allowed to select. And the representative made the examination and reported that none of the land—

Mr. Mills—I interpose the formal objection to the statement "he reported"—(to the witness) unless you know. Have you seen the report yourself?

The Witness-No.

Mr. Mills-And unless the report itself is produced.

Q. By Mr. Lewers—Well, so far as influencing your action in the matter is concerned, Mr. Eberlein, what influence did you [882] receive from the report that was made by this government man?

Mr. Mills—We object to that as so indefinite and vague as to be wholly objectionable.

- A. The impression conveyed to me was, and I found the fact to be, that the suspension order was revoked, at least as to these lands of ours, and we made the selection and the selection list was approved.
- Q. By Mr. Lewers—Now, was the action of the particular inspector who went upon the ground in any way influenced or controlled by you?
 - A. Not at all.
- Q. Or by anyone in your office to your knowledge?
- A. No; not to my knowledge nor to my belief. I don't think anyone did.
- Q. Or was his action directed, so far as you know or ever heard of, by anyone in connection with the railroad?
 - A. No sir, not that I eyer heard of.
- Q. You were informed, were you not, by the representative of the railroad company in Washington, Mr. Chambers, of the result of this examination?
- A. Yes sir, and also, I think, checked that information by the land officers at Visalia.

Q. And there received information as to the letters that had been sent by the Commissioner of the General Land Office cancelling the withdrawal order?

A. Yes sir.

Mr. Mills—We object to that and move it to be stricken out, and all such evidence as that, unless the original reports are introduced.

Mr. Lewers—We will see that they are introduced in due time, Mr. Mills.

Q. Then it is a fact, as you understood it at that time, [883] that the government itself examined and investigated this particular land?

A. Yes sir. I felt that they backed up the non-mineral character of that land entirely.

Q. And for that reason you went ahead with the application, did you not?

A. Yes sir.

Q. And you had no other suspicion or doubt in your mind as to the good faith of the entire matter, did you?

A. No sir, none at all.

Q. Now, on August 31st, according to the exhibit—I will show it to you so there will be no misapprehension. I show you Plaintiff's Exhibit G, and call your attention to the affidavits attached to that, that purporting to be a portion—photographic copy of a portion of list 89. That is your signature, is it not?

A. Yes sir; a photographic copy of it.

- Q. And, turning to the next to the last page, that is also your signature?
 - A. Yes sir.
 - Q. Sworn to before Mr. E. T. Ryan, was it not?
 - A. Yes sir.
 - Q. And it was in fact sworn to before him?
 - A. It was.
- Q. Now, at the time you made that affidavit to the rearranged list, you did so in good faith, did you not?
 - A. I did.
- Q. And honestly and fully believed that it stated the facts?
 - A. I did.
- Q. You had at that time received no information which led you— [884]
 - Mr. Mills-I object to the form of the question.
 - Q. By Mr. Lewers—to a contrary belief, had you?
 - A. No sir.
- Q. Now, when was it, if you recollect, Mr. Eberlien, that you first met Mr. Dumble personally, can you fix it by anything?
- A. I have tried that; I have tried to recall. I don't recollect having seen Mr. Dumble until the day that I first heard about the Kern Trading and Oil Company.
- Q. I call your attention to the letter of October 7, 1904, from you to Mr. Dumble, which has been introduced in evidence, No. OO, and ask you if that letter serves to refresh your recollection in any way as to when you first met Mr. Dumble personally?

A. Well, it was before that, I am very sure, but I have a kind of an idea that it was early in 1904. Leannot now remember of Mr. Dumble having an office in that building. This undoubtedly refers to the old Wells-Fargo Building before the fire.

Q. That is, when you refer to meeting him at room 71, you are referring to the room which you then occupied?

A. That is my recollection. That 71 was the Southern Pacific Land Office.

Q. Now, you say you think you had met him before that time. Had you had any discussion with him prior to that time about any of these matters that have been testified to?

A. I have no recollection. Mr. Dumble was, as I remember it, a Texas man, and his headquarters were at Houston, and I think that he was not in San Francisco such a great time. If he was I didn't know it. But at all events I had very little knowledge of Mr. Dumble for some time after—maybe in 1904, in the middle of the year we may have had something to do [885] with one another; but before that time I have practically no recollection of Mr. Dumble or Mr. Dumble's business.

Q. Was there any co-operation between your office and his office?

A. No; unfortunately not.

Q. And did his office in any way make reports to your office—at that time, I mean?

A. Not at that time, I don't think. In 1905, some

time during the year 1905, I think that Mr. Dumble's office then was organized. He had an office in the Merchants Exchange Building, and I think his field force looked after the collection of royalty oil on a lot of our Southern Pacific oil leases.

Q. By Mr. Mills—Southern Pacific Railroad Company do you mean?

A. The railroad company had a number of leases on royalty basis, and I think he looked after that and made reports as to that, but nothing else that I remember of.

- Q. What time was that? Can you fix the date?
- A. I can't fix that date; in the spring or summer.
- Q. What year?
- A. 1905. It was before the fire.
- Q. By Mr. Lewers—That is, it was just the year before the fire?
 - A. Yes sir.
- Q. And that was the first connection between Mr. Dumble's office and your office, was it?
- A. I think anything like a business connection. I don't remember of anything else.
- Q. Under the resolution which made you the acting land agent of the Southern Pacific Railroad Company, and under the instructions which you received from Judge Cornish and Mr. [886] Kruttschnitt, you in no way considered Mr. Dumble as having any right of exercise of authority over your office, had you?
 - A. I had not.

- Q. And you regarded yourself as the person solely in charge on the Pacific Coast, did you not?
 - A. I did.
- Q. And you were able to look after your own affairs, were you not?
 - A. Ask the other boys. I don't know.
 - Q. That is, you endeavored to do so?
- A. Yes sir. Oh, yes; I felt I would be responsible and so usually insisted on doing the thing in my own way.
- Q. Now, did anything come in any shape, prior to the time when you signed this second affidavit in August, 1904, to lead you to believe that this land was actually mineral land—referring to your own personal belief in the matter?
 - A. No sir.
- Q. Did you ever receive any information that this land in 30-23 was mineral land?
 - A. No sir; I never have.
- Q. And the only circumstance that seemed to you to require consideration was the execution or attempted execution of this lease, was it not?
- Mr. Mills—I object to that question, and all other questions in that form. If you want to testify, take the stand.
- A. I have testified in that matter, and considered it a very impolitic thing to do at that time and I remember now to have had no impression of the mineral character of that land; but it did decidedly convey the impression to my mind, and also to that

of Judge Cornish, that it was a wholly improper proceeding for me to take under the circumstances.

- Q. By Mr. Lewers—That is, you had the impression that it [887] didn't look right?
- A. I had the impression—now, not reflecting on the other gentleman, but so long as I had made a non-mineral affidavit here as to lands that lay alongside and in and among these lands—I had the impression that to make a lease of lands such as was attempted to be made was pretty sure under the circumstances to make trouble and raise a presumption.
- Q. That is, did it mean to you—the existence of this lease—that the lands were actually mineral?
 - A. No; no. It did not.
- Q. Did you anticipate that as the result of the execution of that lease speculators might get in and make locations?
- A. Undoubtedly they would—among other things. The other thing was that the government would undoubtedly have its attention directed at once by the activities of these same oil speculators to the fact as it existed and bring about the question of my good faith when I made that affidavit.
- Q. What you anticipated at that time was this, was it not, that the existence of that oil lease becoming known would cause people to go in there and locate as speculators and in that indirectly bring about possibility of difficulty with the government?
 - A. Undoubtedly they would.

Q. Irrespective of whether or not the land contained oil?

A. Well, I don't remember of thinking that, but undoubtedly that is the case.

Q. Do you know whether or not Mr. C. H. Markham held any position in the Southern Pacific Railroad Company in 1904?

A. I believe he was the vice-president; though as to that I am not sure.

Q. That is, you have no definite knowledge whether he was or not? [888]

A. No sir; I can't say now definitely.

Q. He was the ranking official in 1904 on the Pacific Coast of the Southern Pacific Railroad, was he not?

A. Yes sir; after the withdrawal of Mr. Kruttschnitt to Chicago.

Q. Yes; that is, I mean after Mr. Kruttschnitt went to Chicago?—

A. Yes sir.

Q. Mr. Markham became general manager?

A. Mr. Markham became general manager.

Q. And he was succeeded for a short period by Mr. Bancroft, was he not?

A. Yes; a short time.

Q. He filled in the interim until Mr. Calvin came in?

A. That is true.

Q. Now, when was it if you can fix the time that you first learned from the auditor's office or from any

other source that this lease which you had refused to sign was being acted upon?

- A. My recollection is that as near as I can fix it in my mind from a good deal of thought it was in the fall of 1904. It was before I had the talk with Judge Cornish, at least.
- Q. And it was before the date when the patent was received to this land, was it not?
 - A. Yes sir.
- Q. Now, during the period between August 2nd, when this lease was signed by Mr. Markham, and the time when the patent was granted, you had a number of conversations, did you not, with Mr. Markham about the matter?
 - A. Yes; we had a great many talks.
- Q. Mr. Markham endeavored, did he not, to persuade you to sign that paper? [889]
 - A. Yes, he did.
- Q. He got rather strenuous once in awhile, didn't he?
- A. Yes, he did. We didn't disagree outside, but we did about land management.
- Q. That is, in connection with that matter you didn't agree, did you?
 - A. We didn't agree, no; unfortunately.
- Q. And Mr. Markham expressed his views quite strongly and you did the same, did you not?
 - A. Yes, I did.
- Q. Mr. Markham was pretty insistent that you should sign this lease, was he not?

A. Yes; he did not see why I should not do it, and, as he told me, he considered that he was in charge of affairs generally here on the coast and proposed to manage land affairs, too.

Q. And you didn't believe from your appointment he had authority to do that, did you?

A. No; I didn't, when I was being pulled on the other hand and told that I was to report there. It came to a show-down once or twice.

Q. Now, in your discussions with Mr. Markham about this, did you reiterate any of the other portions which were contained in the letters which you wrote?

A. Yes, we talked those matters over.

Q. And notwithstanding that he still insisted upon the lease being executed, did he not?

A. Well, my recollection now is that Mr. Markham was insistent about the execution of that lease; kept it up, and letters kept coming in asking for it. And you remember Mr. Markham was not there such a long time. He left in the fall, I think, of the same year. [890]

Q. That was when Mr. Bancroft came in?

A. Yes sir. Mr. Markham resigned there quite suddenly to the surprise of everybody and left immediately for Texas. I remember going out with him on the train to Los Angeles, having a long talk with him on the way down.

Q. Where is Mr. Markham now?

A. He is president of the Illinois-Central, with headquarters at Chicago.

Q. Now, did you have any discussion—I mean oral discussion and not by letter—with any other official of the Southern Pacific Company or the Southern Pacific Railroad Company with reference to the execution of this lease?

A. Yes; as I have already testified to, quite an extended discussion with Judge Cornish about it.

Q. Well, did you have any discussion with any other official in New York?

A. Yes, that think was discussed with Mr. Harriman.

Q. And was it discussed with Judge Lovett?

A. Yes sir.

Q. When was the discussion held with Judge Lovett?

A. Well, there was more than one discussion with Judge Lovett. One time I remember discussing it with Judge Lovett and Judge Cornish. As to just what year that was I can't recall, but it was probably since the fire.

Q. Was it not in the month of May, 1908, just before you went to New York?

A. No; that was the time that Judge Lovett, Mr. Cornish, Mr. Harriman and myself had a discussion about a great many things, and this among others.

Q. Then you had had another discussion in which Judge Lovett took part prior to 1908?

A. Yes; oh, yes. [891]

Q. Have you any way of fixing the time when that occurred?

A. I can't think of anything now that would fix it; but, as I say, I believe it was in—Oh, I don't know. It was somewhere around about the time of the fire, either soon before or not long afterwards.

Q. Were you in San Francisco at the time of the fire?

A. Yes sir.

Q. And had you been in New York immediately before that?

A. Now, let's see. Yes; those dates are clear, because of some other matters. I left here on the 28th of December, 1905, and I arrived here just three weeks before the fire. I fix those dates because I was sick with pneumonia most of that time and was in the south; some time in February, I believe, I was in Los Angeles, and afterwards in Yuma and came from Yuma right here, and was sick here and confined to the hotel until just three days before the fire. I happen to fix those dates very certainly.

Q. Now, how soon after the fire, if you have any way of fixing it approximately was it that you went to New York again?

A. I went in May.

Q. Went in May?

A. And I came back in September.

Q. Now, it is your impression that this conversation with Judge Lovett was held on one of those two occasions, either before or after the fire?

A. I think so. It was somewhere in that neighborhood I am pretty sure, though I can't exactly fix it.

Whereupon the further taking of testimony herein was adjourned until Tuesday, July 2, 1912, at 10 o'clock A. M. [892]

On Tuesday, July 2, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed.

CROSS-EXAMINATION OF CHARLES W. EBERLEIN

resumed.

By Mr. Lewers:

Q. Mr. Eberlein, you have had an opportunity, have you not, to read over the testimony which you gave in Los Angeles, to refresh your recollection?

A. Yes sir.

Q. And have you a copy of that testimony before you this morning?

A. I have it here; yes sir.

Q. Referring to the opening part of your testimony, on page 1724 of the transcript, you were asked with reference to the resolution of the board of directors of the Southern Pacific Railroad Company appointing you as acting land agent, and replied to the question that you had not seen that document for years, that you had forgotten all about it. Do you know where that document was kept after the fire?

A. No. It must have been kept in the safe where such papers were kept.

Q. Was that one of the documents which you had in that private file?

A. It may have been. I can scarcely account for

its condition otherwise. If it hadn't been it would have probably been entirely destroyed.

- Q. Well, was that one of the documents which you produced under the subpoena that was served upon you?
 - A. No sir.
- Q. Do you know who did produce that document?
 [893]
 - A. I do not.
 - Q. That is, it was not produced by you?
 - A. Not by me.
- Q. And you have no knowledge of how the government obtained possession of that particular document?
 - A. Absolutely none.

Mr. Mills—I want to interpose an objection here of record, that, in view of the hostility of this witness towards the government, and his very evident bias and interest on behalf of the defendants, I shall hereafter insist emphatically that the common rule of permitting leading questions upon cross-examination is, and of right ought to be, reversed in this case and this man treated as an adversary and hostile witness; and I shall insist upon the right to cross-examine this witness at length, because, in view of his relations to the Southern Pacific Railroad Company and of the corporate character and capacity in which that company is sued, this man might well be said to stand in the shoes of the defendant itself.

Mr. Lewers-The vehement outburst on the part

of counsel is nothing new. It seems to occur every time testimony is introduced which does not favor his particular contention, and is entirely in accord with the outbursts which have appeared from other counsel for the prosecution, including the Attorney-General of the United States. All that we desire in this case—and I will state this for the benefit of counsel for the government-is that the exact facts be brought out, without misrepresentation against this witness or against the defendant companies here, and I have a perfect right to examine this witness as to any matter that was brought out on direct examination. If counsel for the government has any good reason why they do not desire the facts concerning the production of documents that this witness did not produce brought out, I will [894] be very glad to hear those reasons; but in the meantime I shall pursue the inquiry along the lines indicated.

Mr. Mills—I want to say to you for your own benefit that we will bring out everything that we think will be of advantage for the government and everything we believe is of advantage to the Southern Pacific Company or the Southern Pacific Railroad Company. You have charged me, Mr. Lewers, once or twice in this case with unprofessional conduct in seizing papers, and I think you owe me an apology, for his conduct since has shown that the only way to get those papers was to put the witness under subpoena.

Mr. Lewers—I remember very distinctly that my objection was to your method of taking the docu-

ments out of the witness's possession and into your office, and insisted that you proceed at once to examine him about it, and you were unwilling to do so.

Mr. Mills—I could not very well proceed until we had examined the papers. They might not have any materiality at all in this case.

Mr. Lewers—I also call attention to the fact that on page 1724 of the record Mr. Mills stated that before the finish of the testimony in chief of Mr. Eberlein he would show—that is, Mr. Mills would—from whose custody the particular resolution had been produced; and that was not done.

Mr. Mills—Well, I intended to do that before I finished; but it was omitted by inadvertence. I thought perhaps you would want to cross-examine the witness anyway before I introduced any new documents. I don't intend to conceal anything.

Q. By Mr. Lewers—Now, I understand that the papers that referred to the Kern Trading and Oil lease matter were kept by you in a separate file?

A. Kept in my personal custody.

Q. And you began making this segregation into a separate [895] file at what time, as near as you can recollect?

A. Oh, I kept it from the first, from the time that attempted lease came into my possession.

Q. That was some time in August, 1904?

A. The original document on which everything is based came into my possession on I think the 2nd day of August, 1904.

- Q. I believe you testified that on August 2nd you were present in Mr. Markham's office and saw him sign that lease?
 - A. That is true.
- Q. At that time had you made an examination or checked over the list of lands contained in that lease?
 - A. No sir.
- Q. And I understand that you left that day for Denver or Portland?
- A. I left for Denver. That is fixed by the telegrams that passed.
- Q. And how long, as nearly as you can recollect, was it before you returned to San Francisco?
- A. The occasion of my going to Denver was the hearing before the Public Lands Commission appointed by the President, and I was sent there as the representative of the Southern Pacific Company. From there I went to Omaha, and I am not clear as to whether I went on to New York, but I think I did; and I didn't return until possibly the end of the month.
 - Q. Until about the end of August?
- A. I think so. It must have been along about the end of the month.
- Q. That is, you fix that, in a general way, by the correspondence subsequent to that time, do you not?
- A. Yes; I think so. I won't be sure about that trip to New York. I cannot be sure about that. Possibly not. But I did go to Omaha, and possibly to St. Paul. I think that is true. [896]

- Q. That, I presume, is your best recollection?
- A. Well, I am giving you the best I can fix it.
- Q. Have you any memoranda of your movements at that time?
- A. No. Unfortunately all my diaries were destroyed.
 - Q. In the fire of 1906?
 - A. Yes.
- Q. And after you returned to San Francisco did you see this proposed lease?
 - A. Yes sir.
 - Q. Where was it?
 - A. In my office.
- Q. It had been sent to your office in your absence, by Mr. Markham, had it not?
 - A. Yes sir.
- Q. Did you at that time make any examination of it?
 - A. Yes; I went into it pretty carefully.
 - Q. State generally just what you did?
- A. I examined all the provisions and wrote Mr. Markham in detail my views on that lease—the propriety of it.
- Q. Now, prior to that time, when you had made your selection list 89 in 1903, had you made any examination of the maps or plats of any kind to ascertain what indemnity lands were left for selection?
- A. I think not. I don't think there were any maps or plats in the Southern Pacific office at that time,—nothing more, possibly, than the government

maps that we had. I don't recollect of any maps of the grant.

- Q. Well, what method did you use to ascertain where indemnity lands were that hadn't been selected?
- A. I don't remember at this time. I think, though, that the controlling cause at that time was the fact of a recent survey. [897]
- Q. That is, you had been informed, had you, of the Duee survey having been made?

Mr. Mills—I object to the form of the question as leading and extremely suggestive.

- A. Of what survey?
- Q. By Mr. Lewers—The survey of Township 30-23.
- A. There were surveys of several townships, as I recollect, and this must have been among them, in which the company was entitled to indemnity.
- Q. Was your attention particularly directed in any way toward indemnity lands at that time?
- A. Not particularly; except the general policy of getting indemnity as soon as you could.
- Q. Now, who initiated that policy, that is, who formed that conclusion?
- A. Well, that always was my conclusion and my policy in everything connected with any of these grants.
- Q. Then the selection of these indemnity lands was part of your plan in protecting the interests of the company, was it?

Mr. Mills—I object to that question as extremely leading and suggestive.

A. Yes.

Q. By Mr. Lewers—And who ordered or directed that this selection be made, list 89?

Mr. McCormick—Objected to as having been asked and answered twice already.

A. I ordered the selection list be made.

Q. By Mr. Lewers—Was that done at the instigation of Mr. Stone?

A. "At the instigation?"

Q. Yes. [898]

A. No. I rather think I instigated Stone.

Q. Now, how long after you became acting land agent, as nearly as you can fix it, was it that you appointed Mr. Stone your assistant in the office?

A. I think he was appointed in the same month, August, 1903.

Q. And prior to that time he had been doing what?

A. I was told, I believe, he was the land examiner of the department.

Q. And how long did he continue to be your assistant?

A. I believe until the close of the year 1907.

Q. And while you were absent he signed correspondence and did various other routine acts in the office, did he not?

A. Not only routine acts, but he had to be the responsible head of the department in my absence.

- Q. That is, to attend to all matters that you would attend to yourself?
- A. Excepting such as were limited to me by appointment or by governmental regulations, such as signing of lists and things of that kind.
- Q. You understood that you were the only person who had the authority to sign selection lists, did you?
 - A. Yes sir. I believe that is the fact.
- Q. Now, what was the occasion of Mr. Stone leaving the service of the company?
 - A. Well, insubordination.
 - Q. In short, state how that came up?
- Well, to explain: The facts in this case rest upon Mr. Stone's physical condition, largely. I think that is a fair explanation to him. Mr. Stone wasafter the fire, showed signs of break-down; that is, he was very nervous. I gave him quite a long leave of absence, in the hope that he would be in [899] condition again, but he came back and didn't show any improvement, much, and he became incapacitated to handle the heavy work of the office. It must be remembered that at that time the department was under severe stress from all sides. We had no records; everything had to be made anew; our correspondence files were gone; even our very contracts for the sale of land that the company had was destroyed—utterly wiped out. Those contracts were executory contracts, executed in duplicate, one copy in the hand of the vendee outstanding. Neither copy was on record except in a very few instances; and we were

in a pretty serious predicament. The work of handling all the detail of the office and at the same time bringing up records that had to be gathered from all quarters, was too much for Mr. Stone; he could not stand it; and he got so far behind that it became necessary for me to do something. Having in mind his long service with the company, I didn't want to do anything to hurt Mr. Stone in any way; so I divided the work, appointed another assistant, giving him a younger man and one better qualified to handle that class of work, charge over the office. And as all our gradings and examinations of land that had been collecting ever since the department was established had also been wiped out, there was the necessity of a very great deal of work to do in the field and it was time that it had to be taken up. There was enough there for two assistants to do. So I appointed Mr. Stone to organize a department of his own, with his own subordinates, his own field men, to take full charge of that, map the work out and prosecute it. His office was next to mine, and he was entire master of his own movements. He had the same salary and the same title. That didn't seem to suit Mr. Stone at all, though he didn't make any particular objection to it, as I remember it. I was called to New York; and at the same time the city of Los Angeles was exceedingly [900] anxious to get a right of way for the new viaduct across certain granted lands and indemnity lands of the company. It became necessary to examine those lands in order to make some selection lists; some surveys had to be made. It was an urgent

matter and one which we felt was not only right but good policy for the road to do everything it could to forward the work for the city of Los Angeles. asked Mr. Stone to take particular charge of that and see that that work was done just as soon as possible and I thought he had better go down there and start it, keep his hand on it and get it done just as quickly as possible. I was east during all the time. He went away. Mr. Stone, it seems, took exactly the-placed an entirely wrong construction on everything; went into the field himself and stayed down there, and came back, and I found out after several weeks that he hadn't been to the office at all. I wrote to him about it, asked for a report; and then he said that the work I had put upon him was too severe, that he could not stand it. I wrote him calling his attention to the terms of his appointment; they need not be any more severe than the work he was doing-probably would not be so severe. But he was in that frame of mind that he didn't intend to co-operate at all, so I had nothing to do but give him his time and tell him to hunt other employment. I gave him, I think, a month in which to place himself somewhere else. It may have been longer; I don't know. That is the whole story of Mr. Stone's leaving the department.

Q. And what was Mr. Stone's attitude toward you after the last occurrence when you told him to hunt other work?

A. Well, I am advised it was pretty hostile.

Mr. Mills—I move that that answer be stricken, as purely hearsay.

- Q. By Mr. Lewers—Did you have any personal interview [901] with him yourself after that time?
 - A. No sir.
 - Q. When was that?
- A. In November, 1907, my last letter was written to him, the letter in which I told him to hunt for other employment.
 - Q. Did you receive any letters from him?
 - A. I think I received two communications.
 - Q. Do you know where those are?
 - A. Yes.
 - Q. You have them?
 - A. Yes.
 - Q. Have you them with you?
 - A. I think Mr. Mills has those letters.
 - Mr. Lewers-Have you them, Mr. Mills?

Mr. Mills-Yes. I will get them. Do you want them now?

Mr. Lewers—If you please. (Letters produced and handed to counsel for defendants.)

Q. I show you a letter dated December 5, 1907. Is that one of the letters you referred to as receiving from Mr. Stone?

- A. Yes sir.
- Q. And I show you another letter dated February 14, 1908. Is that the other letter?
 - A. That is the other letter.

Mr. Lewers—We offer both of these in evidence, together with the envelops.

Mr. Mills-No objection at all.

Mr. Lewers—I will read the letter of December 5, 1907, into the record: "Oakland, December 5, 1907. Mr. Charles W. Eberlein, Care Hon. W. D. Cornish, 120 Broadway, New York. Dear Sir: In reply to your letter of November 30th I have just sent the following telegram: "Your letter November thirtieth received. Work outlined therein very different from that called [902] for by the previous telegrams and letters and can be undertaken with pleasure if you so desire and direct. Yours truly, Geo. A. Stone."

The letter last referred to and offered in evidence is marked "Defendants' Exhibit 2—L. L."

Mr. Lewers-The second letter, of February 14, 1908, reads as follows: "2535-A Channing Way, Berkeley, California. February 14, 1908. Charles W. Eberlein, Acting Land Agent S. P. R. R. Co., James Flood Building, San Francisco, Cal. Dear Sir: Will you kindly advise me whether the company is willing in any way to show its appreciation of my faithful service of over thirty-five years. If the company has no further use for my services, as would appear from recent correspondence with yourself and other officials, it seems to me that as I have nearly doubled the length of service required for retirement I may properly be placed on the shelf with disabled and superannuated veterans. Thanking you in advance for your kindly offices in my behalf, I remain, Yours truly, George A. Stone."

The letter last referred to and offered in evidence is marked "Defendants' Exhibit 3—L. L."

- Q. Did Mr. Stone write you any other letters during that period that you can recollect?
 - A. I believe not.
- Q. And did he ever write you a letter or tell you personally that he was going to make complaint to the government about any matter that occurred in the office?
- A. No sir, I have no recollection of his ever saying any- [903] thing to me.
- Q. Did you ever have it brought to your attention in any way that he had made such a statement, prior to the time he testified in this case?
 - A. Yes sir.
 - Q. When?
- A. In New York, at about the time, I think, that that last letter came to me, he wrote a letter to Mr. Kruttschnitt which was very peremptory in tone and in which he threatened that unless something was done for him, either reinstatement or pensioning, that he would immediately lay before the United States government, the Department of Justice, I think he said, and the press certain facts in his possession.
 - Q. Did he say what they were?
- A. No. It was a very brief letter. That letter was referred to me in New York by Judge Cornish.
 - Q. Was any answer made to it?
- A. Not that I know of. I had these letters at that time, I believe. I showed them to Judge Cornish and we did not consider them important.

- Q. And so nothing was done?
- A. Nothing was done.
- Q. Now, in connection with the selection of list No. 89, was there any unusual haste in the preparation of that list?
 - A. Not that I know of.

Mr. Mills-If you know.

Mr. Lewers—I am assuming he will only testify what he knows.

Mr. Mills—I am assuming you are doing the testifying most of the time.

A. No.

Q. By Mr. Lewers—What was the fact, so far as you [904] recollect, about the manner in which that list was made up?

A. I have very little recollection about it, to tell you the truth. I became left with the responsibility of that office. I took possession of it August 12th. I did it under protest, because of its interference with my other duties and the what I was afraid would be very great embarrassment to me, which is exactly what happened. It became necessary to make an entire reorganization of that department. The books and records also were in a very confused condition. I had to get an entire new set of clerks, for one thing, and my time was completely taken up with all those administrative details. My recollection is that I tried to keep up these other matters at the same time, and instructed Mr. Stone to make up a list selecting indemnity in the recently surveyed lands.

- Q. Now, how soon after you took charge of the office did you direct this list to be prepared?
- A. I think it was very shortly after. I can't give you dates.
 - Q. I mean approximately?
- A. Oh, I think it was in that month, in the middle of the month, probably.
 - Q. Of August?
 - A. Yes sir.
- Q. And the other work was carried on that you have outlined during the same month, was it?
 - A. Oh, yes.
- Q. Now, referring to page 1733 of the transcript of your testimony at Los Angeles, you were asked concerning your knowledge of Mr. Dumble, and the following question was asked of you: "Well, as geologist of the Southern Pacific Company did he have anything to do with the lands of the Southern Pacific Railroad Company? A—No sir. Q—That is, officially, you say? [905] A—No sir; he had none that I know of. Q—But he did attempt, did he not, to have something to do with the lands of the Southern Pacific Railroad Company? A—Oh, he butted in frequently." Now, when was it that Mr. Dumble began to butt in?
- A. Well, since I have testified, I tried to find, in my own mind, when I first met Mr. Dumble—came into collision with him, so to speak. I have no recollection of Mr. Dumble in the year 1903. I don't recollect that he even had an office. I don't think he was

in San Francisco much at that time. I may have heard of him, probably did, but I don't think I met him. The nearest I can fix anything was in the year 1904, when I presume the Kern Trading and Oil Company was in process of formation. He was in San Francisco a good deal at that time. I fix something by a letter there written to him by me, which refers to that room 71.

Q. The letter of October?

A. That is in October. Well, I probably knew him for some months before that. How many, I can't now tell. Anyhow we had very little to do with one another—so little that there is nothing that fixes it in my mind.

Q. When you used the expression that he "butted in" frequently, what period of time did you have in mind?

A. Well, subsequent to that time of which I am testifying now. I don't remember of his having anything to do with me before that time.

Q. Then it was subsequent to some time in 1904?

A. Yes; I think so.

Q. And after 1904 you saw more of Mr. Dumble than you had before, did you not?

A. Oh, yes. He had an office in the building. Especially after we moved to the Merchants Exchange Building.

Q. Now, on August 2nd, 1904,—I am referring to page [906] 1735 of the record—you received a letter from Mr. Markham enclosing the proposed lease

which has been introduced here in evidence, did you not?

A. Yes.

Q. That is, you received about that time a letter of that date. Do you know whether you received it the day it was written or not?

A. I judge not from the fact that Mr. Stone wired me in Denver that it had been received. I left the city that afternoon or evening. The letter being written on the 2nd was probably not received until the 3rd.

Q. That is, from the fact that Mr. Stone acknowledged this and notified you—

A. By wire.

Q.—you assume the letter was received after you left?

A. Yes sir.

Q. And you received a telegram in Denver from Mr. Stone, did you not?

A. Yes sir.

Q. Which is dated August 4, 1904?

A. Yes.

Q. And in reply to that telegram you wrote Mr. Stone on the same day, August 4, 1904, directing him to hold the Kern Trading and Oil lease until you returned, did you not?

A. Yes sir.

Q. And in that you stated "that there were no lands for sale at present and no oil lands for sale at any price. Do as told without reference to me"?

A. Yes.

Q. What had you told him to do that you referred to there?

A. I referred there to Mr. Stone's peculiarity of sending me when I was away notice of every little thing that transpired. [907] Now, the orders were that the lands were not for sale. There was a great deal of demand and especially a great many people running in to buy what they supposed was oil land, or what was known to be oil land. I wanted to head him off from sending me applications of people and saying that this man, that man and the other man had been in, and asking for instructions. I wanted to give him general instructions on it and head off any of that. He could say just as well as I could. There was no necessity for it being brought to my attention.

Q. By Mr. Mills—That is to say, he had the same powers, you mean, that you had at that time?

Mr. Lewers—Well, I prefer that you would not interrupt my examination, Mr. Mills.

Q. Your direction to Mr. Stone was to look after these matters in your absence in accordance with the instructions you had given?

A. Yes sir.

Q. Without bothering you, while you were away, with the details?

A. Yes.

Q. Now, you say it is your recollection that you

returned probably about the end of the month of August?

- A. I think so.
- Q. Referring to the letter of Mr. Markham, of September 5, 1904, page 1743, do you remember whether that letter was received by you?
- A. I think it was received while I was in the office.
- Q. And did you make any reply to that particular letter?
 - A. I think I did.
- Q. Is your letter of September 10th to Mr. Markham a reply to the letter of September 5th that I have referred to?
 - A. I believe it is. [908]
- Q. That is, in your letter of September 10th to Mr. Markham, which appears at page 1748. You say, "I have your letter of September 5th, in regard to the lease," and so forth. In saying that you were referring, were you not, to that letter of September 5th which is in evidence?
 - I believe that is the letter I replied to.
- Q. Now, you say in that letter, in the second paragraph, that you have gone over the matter with some thoroughness, and beg to report that the instrument is not in condition for execution. Now, what examination had you made at that time of the lease?
- A. For one thing, I had had the lands checked up with our records.
 - Q. For what purpose?

A. To determine ownership. That is the first essential.

Q. Now, what had been the result of that checking?

A. As I believe is stated in this letter, there were some serious mistakes. For instance, there were lands included in that lease that were not in the ownership of the Southern Pacific Railroad Company, so far as I was advised—the record didn't show it—and some that were not within either granted or indemnity limits, and therefore entirely outside of the jurisdiction of the Land Officer. He could not make a lease on those lands.

Q. Have you any recollection of the amount of land that was not in the ownership of the Southern Pacific Railroad Company in that list?

A. No, I have not. I don't remember. And probably it was a scattered tract here and there; but the fact was that it was outside of the granted and indemnity limits and therefore outside of any lands over which I had any jurisdiction or could make any conveyance. [909]

Q. What I am getting at first is, was there any land, to your recollection, which was inside of the granted or indemnity limits but not owned by the Southern Pacific Railroad Company, in that list?

A. I don't remember as to that, unless it be in the case of the townsite of McKittrick. The townsite of McKittrick, as I remember it, was on a granted section. The company had platted the townsite of Mc-

Kittrick several years before, or a year or two before, perhaps, and I believe that they had disposed or deeded or otherwise disposed of certain lots in that townsite. Now, the effect of this lease in regard to that townsite was that they ignored the platted character of it. It was attempted to be conveyed in this lease by its government subdivision, ignoring the fact that it had been regularly and legally platted, and plats of record, and I believe certain lots, parcels of land, in it, had passed from the ownership, or at least the record title had passed from the railroad company, and therefore were not subject to any action by the Land officer at that time.

- Q. That is then one of the things that you referred to when you spoke of the inclusion of lands not in the ownership of the Southern Pacific Railroad Company?
 - A. That is one of the things I had in mind.
- Q. And you specifically referred to the townsite of McKittrick.
 - A. I think I did, yes.
- Q. Which is in the next paragraph. Now, at the bottom of the first page you say, "There are several provisions of the lease itself which I think should be modified. As it stands the lease provides for the payment of a royalty of one-tenth of the gross product or one-tenth part of the gross amount of moneys received from the sales of minerals, substances and [910] products. The obvious construction of this clause is a permission to some one, not specified, to

sell the company's royalty without limitation as to who may do so or the price to be received, etc. That clause giving permission to the lessee to use our oil or dry asphaltum for fuel, etc., without payment of royalty thereon is in conflict with that provision which gives to the company one-tenth of the gross product. In my opinion the one-tenth royalty being a small royalty at the present time at least should not be subject to any deduction, and especially to a deduction of this kind which is indefinite." Now, was that in your mind at that time a serious objection to the lease from the standpoint of policy?

A. Yes sir.

Q. Why?

A. For just the reason stated. I could not take the responsibility of making that lease for the railroad company and assuming the responsibility myself with those clauses in, and especially with my entire ignorance of everything that pertained to this lease—its inception and every fact and circumstance connected with it. I knew nothing of it. I knew nothing of the necessities of the case, and therefore I was obliged, for my own protection if nothing else, to go on record here and call attention to what appeared to be on the face of things defects.

Q. Well, had you not at that time heard of the prior organization of the Kern Trading and Oil Company?

A. I think I had heard something of the Kern Trading and Oil Company, just the floating talk around the building; but as to what that company was or what it was to do or who its officers were or anything about it, I didn't know. I think I reported to my chief to that effect.

- Q. By Mr. Mills—Permit me to ask who was your chief that you reported to? [911]
 - A. W. D. Cornish, of New York.
- Q. By Mr. Lewers—Were you in San Francisco during the month of November, 1903?
- A. November, 1903? I may have, though I can't fix that. I was called to New York frequently, and especially early in my time in San Francisco I was called there in reference to matters that I had had charge of in Idaho and in the Union Pacific's territory and in the suit in Texas; so that I can't recall. I made a trip to Texas in that year of 1903. Now, just when that was I don't recall. I was in Portland that year; now, just what time that was—

Mr. Mills—I shall have to object to any further statement, as irresponsive to the question.

Mr. Lewers—I am trying to ascertain whether he was in San Francisco in November, and I think it is responsive.

Mr. Mills—I think he may say whether he was in San Francisco in November, but not in Texas in the early part of the year.

Mr. Lewers—The witness is endeavoring to fix the time. Proceed.

A. I am trying to fix that to the best of my ability. I can't say definitely whether I was there in

October or November for the reason of that trip that I took, I am very sure, in that year to San Antonio in closing up some matters which I had been making examinations in that year of 1903.

Q. Now, did you not hear of the organization of the Kern Trading and Oil Company some time in the fall of 1903?

Mr. Mills-Objected to as extremely leading.

A. I don't recall that, and I hardly think so. At least, it didn't become as important or as talked about until 1904, that I now recall. I may have known about it then; I may have heard something about it. [912]

Q. By Mr. Lewers—Well, did you hear any talk or see any correspondence of any kind with reference to transferring or leasing any lands to this company prior to August 2, 1904?

Mr. Mills—We object to that question as it manifestly calls for immaterial and irrelevant answers.

A. To the best of my recollection no. Lapse of time has a very great deal to do with things I have not charged my mind with; but that is my recollection at this time.

Q. By Mr. Lewers—Now, proceeding with the statements in that letter of September 10, 1904, you say, "The clause of the lease which provides for the payment of taxes upon improvements only is not in my opinion fair to the railroad company. By reason of the improvements the assessment on the land is largely increased. The company gets only one-tenth

of the products and pays a large part of it in taxes upon an exceedingly high valuation. Taxation upon improvements amounts to but little. The improvements are not of an expensive character and are subject to deterioration from the time they are made." Now, at that time did you regard that as a serious objection to the lease?

A. Yes sir; because I believe, as nearly as I could figure it out, that the Southern Pacific Railroad Company would not get a cent out of this.

Q. Out of the ten per cent?

A. No sir; and it would probably be on the other side of the ledger, by reason of this lease.

Q. Did you, at the time you wrote the letter of September 10th, have any information in your possession as to the lands which were actually producing oil?

A. Excepting certain lands that were producing oil upon which the company had negotiated development leases; and it is upon the experience with those leases, the amount of taxes we paid on those lands, the disparity between the amount of the taxation [913] of the land and that upon the improvement, is what I was basing my judgment upon as expressed in that letter.

Q. Now, where were these lands that you now refer to?

Mr. Mills—Let me interpose the objection for immateriality.

A. They were in the Kern River field, and I be-

lieve some in the Coalinga. I don't recall those anywhere else, but I believe in those two fields.

- Q. Had you, at the time when you wrote this letter on September 10, 1904, any information in your possession as to the discovery of oil or any indications of oil anywhere near McKittrick?
 - A. I believe not.
- Q. Now, you proceed in the letter and state as follows: "In addition to this there is a very urgent reason for delaying the execution of these papers. We have selected a large body of land interspersed with the lands sought to be conveyed by this lease and which we have represented as non-mineral in character. Should the existence of this lease known, it would go a long way toward establishing the mineral character of the lands referred to and which are still unpatented. We could not successfully resist a mineral filing after we have practically established the mineral character of the land. I would suggest a delay at least until this matter of patent can be adjusted." Now, was it your understanding when you wrote that letter that the lands that you were applying for in list 89 were interspersed with the lands mentioned in the proposed lease?
- A. I think the examination after putting them on paper, showed that maybe the word "interspersed" is not the right word to use. They occupied a position that was very close—adjacent, as I remember it, in many cases. [914]
 - Q. But what I am getting at, if you can recollect,

is whether, at the time when you wrote this letter, you understood that these lands were interspersed with the lands which are included in the lease?

A. I think so. I think that was my belief at the time I wrote the letter—at least, that they were in very dangerous proximity to one another.

Q. And when you say, "We could not successfully resist a mineral filing after we have practically established the mineral character of the land," did you understand that the execution of the lease itself would establish that there was mineral in the land?

A. No; I don't think that that would follow. It did establish in my mind, knowing, as I did, from pretty long and hard experience, that any fact of that kind would be seized upon by the government department and would be used against the—

Q. By Mr. Mills-What land department?

A. The United States General Land Office, and would be used against the Southern Pacific Railroad Company to deprive it of the land.

Q. By Mr. Lewers—Now, at the time when you wrote that letter, on September 10, 1904, were you aware that the government had made an examination of that land and found it non-mineral?

A. At what date?

Q. When you wrote this letter of September 10, 1904?

A. I believe that the Interior Department Examination was either completed or in progress at that time.

- Q. Well, isn't it a fact that the withdrawal was cancelled in February of 1904?
- A. That I can't testify to, because I don't remember the date. It probably was, but I don't thing it alters the fact as [915] set forth in that letter and the danger that would accrue.
- Q. Well, what I am getting at is whether or not this examination by the government had not been completed prior to your writing this letter of September 10th?
 - A. It probably was; it probably was.
- Q. Now, proceeding, you say, "I call your attention to the fact that this lease conveys oil lands and also assigns the existing oil leases. That being the case the management and control of oil matters will pass entirely from the land department. It seems a little singular that the company should assign oil leases which provide for the payment of royalties running from one-fifth to one-eighth, and now being paid to the company at that rate, and receive therefrom a decreased revenue without consideration, so far as disclosed by these papers." Now, was that, to your mind at that time, a serious objection?
- A. If I had been the lessor, it would. But certainly it emphasizes the fact that I was entirely in the dark as to this whole proceeding, and the necessity, inasmuch as I was taking the responsibility, or expected to, of putting the thing squarely up to my superior officers, letting them judge, and if anything had been overlooked or anything had crept in here

inadvertently, that it might be corrected at that time.

Q. That is the reason you sent a copy of this letter to Judge Cornish, is it not?

A. Yes sir; I always informed him of everything that went on.

Q. And your experience, you say, with other individual leases in Kern River and Coalinga, had shown, even with their royalties and the payment of taxes, that there was no profit?

A. Very little profit, I think, in a great many cases. I won't say a great many, but in some cases that I had occasion to look into. The taxes are very high. Being railroad property [916] the railroad had to stand an exceedingly high valuation on its property. As I remember it, there was discrimination, and the railroad paid more taxes on the same character of propety than individuals on adjacent lands.

Q. Now, were you informed at that time by anybody as to what test had been applied in determining what land should be included in this lease to the Kern Trading and Oil Company?

A. No; I knew nothing about that I know of.

Q. Were you informed by anybody as to whether only proven oil lands were included or whether they covered a large territory, good, bad and indifferent?

A. I don't recollect of having any information; and if I had any opinion at that time it was, probably, that they had taken in a whole countryside there in that lease. It looked like it, at least, when they got it on paper.

Referring to page 1753 of the record, to the letter of Mr. Markham, of September 14, 1904, it states: "Referring to your letter of September 10th, relating to status of our oil leases, I see no objection to going ahead with the original program of assigning to the Kern Trading and Oil Company all oil leases now outstanding, but I shall want you to continue your connection with the leases until such time as questions now under consideration shall have been disposed of. I quite agree with you that as a condition precedent to the continuance of at least a majority of the defaulted leases we should require that all undeveloped territory be surrendered to the company, leaving only the tract actually being developed subject to the terms of the lease." Now, did you write any other letter to Mr. Markham on September 10th besides the letter which appears in the record to which I have been referring?

A. Well, it would seem so from that extract you have just read. I remember that discussion. [917]

Q. Well, did you have any oral discussion with Mr. Markham about the matter that is referred to in his letter of September 14th?

A. About that matter that you have just read?

Q. Yes.

A. It is possible. I was called to his office at frequent intervals, and usually these matters concerning oil leases were discussed. The matter under discussion in that letter simply refers to the fact that we had a number of oil leases which under my con-

struction, I was obliged to compel performance of. When I took possession, there were a number of leases, royalty leases as we called them, which were badly in default; people were not operating them at all; and I had to get after those people pretty strong to make them produce and pay the royalty or else cancel their leases. I thought, and Mr. Markham evidently agreed, that it was a pretty hard thing to go after men who had spent a great deal of money in putting down wells and who from one reason or another could not continue or were not at that time pumping, and with one stroke cancel all their rights and interests. That was very drastic. And the only way out of it that I suggested was to let them surrender such land as they could not develop-hadn't the money-and let the company lease that to somebody else, so as to get the production.

Mr. Mills—I must interpose another objection for immateriality.

Q. By Mr. Lewers—And you say that you and Mr. Markham had discussions concerning this matter in his office?

Mr. Mills—Object to that question as extremely leading.

A. Yes sir.

Q. By Mr. Lewers—And do you recollect at this time writing any other letter on September 10th to Mr. Markham be- [918] sides the one which has been introduced in evidence?

A. Inasmuch as this letter which appears in the

record as September 10th has no reference to the matter spoken of in this letter of Mr. Markham's of the 14th, I think that the conclusion must be that I wrote a letter to him which he fixes as of September 10th. Now, whether he made a mistake in the date or whether I did actually write another letter of even date with the one which appears in the record, I can't say.

Q. I call your attention to the first paragraph of the letter of September 14th by Mr. Markham. Does not that refer to the matter contained in your letter of September 10th, and might not the explanation of the second paragraph be that you and Mr. Markham had discussed the matter orally?

Mr. Mills-Objected to as leading and suggestive.

A. Well, that is a construction that I hadn't thought of. It is possible.

Q. By Mr. Lewers—The first paragraph does refer to matters in your letter, does it not?

Mr. Mills-Objected to as leading.

Mr. McCormick—And calling for the conclusion of the witness.

A. The first paragraph of the letter of September 14th undoubtedly refers to this matter of the execution of this proposed lease; and it also refers to the proposition discussed in the letter of mine of September 10th to assign those leases.

Q. By Mr. Lewers—Now, I call your attention to page 1755, to a letter of Mr. Markham of September 21st, in which he says: "Referring to your letter of September 10th on the subject of proposed lease from the Southern Pacific Railroad Company to the Kern Trading and Oil Company, would ask that you kindly check this matter at an early date as possible and let me know promptly from your standpoint whether there is anything in the [919] lease that is really objectionable, consulting with Mr. Dumble and the law department in order that the lease may be properly drawn." Now, did you receive that letter?

A. I think I was there at the time. I may have been in Portland, but I think probably I was there. No, I beg your pardon; I was not in the office in San Francisco. It clearly appears from my letter dated, "Portland, Oregon, September 21st," the same date.

Q. Referring to page 1758?

A. Yes.

Q. Do you know whether the letter of September 21st came to your attention?

A. It came sooner or later, but just when I don't know; probably when I returned to the office.

Q. Now, on September 21st, 1904, you again wrote Mr. Markham, did you not?

A. Yes sir.

Q. Page 1758. That letter was written from Portland, was it not?

A. Yes sir.

Q. And do you recollect now approximately how long after you wrote that letter that you returned to San Francisco?

A. I don't remember, off-hand, when; but I think I must have returned during that month, because I was writing Mr. Dumble early in October.

Q. That is, on the 7th of October?

A. On the 7th of October.

Q. Now, in your letter from Portland, of September 21st, you say, "I will take this matter up immediately upon my return and I think we can make such a settlement as will give satisfaction all along the line." In that you were referring, were you not, to these leases? [920]

A. Yes sir; I think so,—the oil leases that had been under discussion.

Q. That is, those that were forfeited?

A. Or that might be forfeited, and probably notices had been served on the defaulted lessees.

Mr. Mills—With reference to the letter on page 1753, had you entirely finished with that letter? You stopped just before the sentence beginning, "as a further consideration."

Mr. Lewers—Yes, I thought I had; because the rest seems to be devoted to some proposition that has already been asked about.

Mr. Mills—I didn't know but what you wanted to ask Mr. Eberlein about the next sentence in the letter, "As a further consideration I believe we should require that the product be shipped over the Southern Pacific Company's lines."

Mr. Lewers—No; I don't intend to ask about that.
What was the purpose of the suggestion?

Mr. Mills—I wanted to know why you stopped in the middle of the letter. You had gone through the first letter completely and in all the other letters you go into them completely, but you stopped where it seems to have injured you.

Mr. Lewers—If you want to know, I hadn't noticed that until you called my attention to it. I don't regard it as of half as much importance as you seem to.

Mr. Mills-I regard it as extremely important.

Q. By Mr. Lewers—Now, referring again to your letter from Portland, which Mr. Mills don't seem to want me to ask you about—

Mr. Mills-Yes; I want you to go fully into it.

Q. By Mr. Lewers—(Continuing.) You say, "I shall have a new oil lease to submit to you, one feature of which will be that the lessee shall be restricted to just so much land as [921] they can and will bind themselves to develop." You there again refer to individual leases, did you?

A. Yes sir.

Q. And not to the general broad lease?

A. No, no.

Q. Now, on page 1759, the second portion of that letter, second page, you say: "I don't know anything about the Kern Trading and Oil Company and have been left in the dark entirely as to the object and purpose of it. I did not wish to blunder along and bring myself into collision with Mr. Dumble in regard to matters as to which it would be his right

and not mine to decide. I wish to remind you, once more, that the lease to the Kern Trading and Oil Company, submitted to me, should not go through in its present shape, and that the schedule of lands referred to should be revised and corrected." Now, when you state that you don't know anything about the Kern Trading and Oil Company and have been left in the dark entirely as to the object and purpose of it, did you mean that at that time when you wrote that letter you had not been informed as to why the Kern Trading and Oil Company was getting this lease?

A. I think I had no official notice, information, at all about it.

Q. Had you been informed at that time as to what sort of land was being turned over to the Kern Trading and Oil Company?

A. No; I don't think they had informed me anything.

Q. Now, you say, "I wish to remind you, once more, that the lease to the Kern Trading and Oil Company submitted to me should not go through in its present shape and that the schedule should be revised and corrected;" what did you mean by that?

A. Just calling attention once more to the defects I have testified to a short time ago, that there were lands in there of which I had no jurisdiction, that the land officer [922] could not make a valid lease as to lands outside of the granted lands or other lands that had passed beyond the control or ownership of the Southern Pacific Railroad Company.

- Q. Had your office been consulted in any way, to your knowledge, in the preparation of this list?
 - A. I think not.
 - Q. You hadn't been, had you?
 - A. I hadn't been, that I remember, at all.
- Q. And was your statement in these various letters concerning this list being incorrect in the ways you have mentioned, based upon the records in your office?
 - A. Yes sir.
- Q. And that statement was, according to your records, a true one, was it?
- A. Was true as far as our records could show. Of course it was possible that the Southern Pacific Railroad Company might own lands without my knowledge or any knowledge of the land department, which was organized and controlled and directed only land grant lands. My powers, granted to me by the board, covered only land grant lands.
- Q. Referring to page 1761 of the record, on October 7, 1904, you wrote to Mr. Dumble stating that, "You would be glad to take matters up with him as suggested any time tomorrow that will be convenient to you. I would suggest that you might find it more convenient to come to room 71, where we can have a room to ourselves and not be disturbed. If, however, you prefer I should come to your room, please advise me." Now, do you know whether or not the meeting that was referred to in that note to Mr. Dumble was had?

A. I don't remember anything about it. We may have met and talked over matters relative to this proposed lease at Mr. Markham's suggestion. [923]

Q. Well, have you any recollection of that meeting?

A. I don't remember a thing about it, and only that letter—nothing of any importance occurred, I think, because I don't recollect of any meeting with Mr. Dumble at all at that time. I must have had it, though, because Mr. Dumble refers to it in a subsequent letter.

Q. Now, referring to page 1763 of the record, to your letter of October 8, 1904, that letter was signed by Mr. Stone, was it not?

A. Yes sir; it seems to be.

Q. Well, do you know whether you were in San Francisco at that time?

A. No, I don't. October 8th.

Q. Now, you were there on October 7th, the day before, were you not?

A. I was probably there. If I was there the 7th I was probably there on the 8th; but I didn't sign that letter, and that might lead to the belief that I had gone to Texas or somewhere else at that time.

Q. But at the time when you wrote that note of October 7th, 1904, to Mr. Dumble, you expected to be present on the following day, did you not?

A. Apparently, from that note.

Q. And do you have any recollection of leaving?

A. No; I have not. I have not any recollection

of—No; that is something it is utterly impossible for me to fix.

Q. Now, in the letter of October 8, 1904, the statement is made, "Herewith I hand you plats showing the status of lands within the Southern Pacific Railroad Company's grant in," mentioning certain townships. Now, had there not been some discussion between you and Mr. Markham prior to that time with reference to the correctness of the description in the proposed [924] lease, and had you not called his attention to the fact that lands were included that didn't belong to the company?

A. I think I did tell him the fact. I called attention to it in the letter, certainly.

Q. Now, did you direct the preparation of any plats to show what the status of the Southern Pacific Railroad Company's title to the lands in the vicinity of McKittrick was?

A. I don't recollect of having directed any. I possibly did, if I had; but it was a matter that would not call for any direction from anybody, because it was a frequent matter for the operating department or the general manager or the engineering department to call for a plat showing our ownership of land and what condition it was in. Very often it became important to know whether lands were even surveyed, and they were furnished without any reference to me.

Q. Now, there was introduced in evidence as Plaintiff's Exhibit UU a plat, and I call your attention to that plat and ask you whether or not that is one of the plats that is referred to in the letter of October 8, 1904, sent to Mr. Dumble?

A. It may have been a copy of that. Now, I can't fix that. This was made evidently for my information, and it may have been, possibly was, a copy of a map furnished Mr. Dumble.

Q. Now, I call your attention particularly to the contents of that letter of October 8, 1904, where the statement is made over your signature by Mr. Stone, "Herewith I hand you plats showing the status of lands within the Southern Pacific Railroad Company's grant in Township 19 South, Ranges 14 and 15 East." Is that shown upon the plat?

A. Not on this plat?

Q. Not on that plat?

A. No. There must have been other plats furnished at the same time. [925]

Q. "Township 20 South, Ranges 14 and 15 East."

A. No.

Q. "Township 21 South, Ranges 14 and 15 East?"

A. No.

Q. In the Coalinga district. And "Township 30 South, Ranges 21, 22 and 23 East."

A. That is on this plat.

Q. "Township 31 South, Ranges 22, 23 and 24 East."

A. That is on this plat.

Q. "Township 32 South, Ranges 23 and 24 East?"

A. That is on this plat.

Q. Now, does that plat show the status of the title of the Southern Pacific Railroad Company to the lands in the townships last referred to?

Mr. Mills—Objected to, as immaterial and not fairly raised by this letter.

Mr. McCormick—The plat speaks for itself.

Mr. Lewers—I want to show that this is probably the plat, a copy of the one that was sent with that letter, which does not appear in the record.

Mr. Mills—You are mistaken about that. This plat is the one that came with the lease.

Mr. Lewers-Found with the lease, he says.

Mr. Mills-It accompanied the lease.

A. My understanding is that it did show the status of title at the time it was made. I didn't make it. It was furnished to me by those gentlemen whose names are signed as having checked it with the records—accepted by me, at least, as that.

Q. By Mr. Lewers—Now, this plat is stamped with the date "September 16, 1904?"

A. Yes. [926]

Q. Did you have such a stamp in your department?

A. Yes, we dated things, dated papers.

Q. With a rubber stamp in that way?

A. It was a dating stamp, I believe. I don't know. Those are details which I didn't have any occasion to have anything to do with.

Q. Now, did that map accompany the proposed lease that was sent to you on August 2nd?

A. No sir.

Q. Have you any recollection of where that plat did come from?

A. This plat?

Q. Yes.

A. It came out of the land department, made in the land department, evidently.

Q. Did it in any way accompany that lease, as a part of the lease, or in connection with it, to your knowledge?

A. Not this plat, that I know of.

Q. It is a fact, is it not, that that particular plat that I show you was found with the lease after the fire?

A. Yes sir.

Q. And that was in the vault in the land department, wasn't it?

A. Yes sir.

Q. In which building?

A. In the Merchants Exchange Building, in which we were burnt out April 18, 1906.

Q. Do you remember seeing that plat before the fire?

A. I think I must have seen it.

Q. Now, I call your attention to the notation that appears in several places on that plat, where the word "lost" occurs. What was the meaning of that? [927]

A. I understand that those are lands that were patented adversely to the company. This is the

westerly 30-mile limit, or the indemnity limit, of the grant. These are evidently adverse claims on these lands—possibly homestead entries.

- Q. I call your attention to the legend that appears at the lower left-hand corner of that plat, and will ask you to read that, if you can.
- A. Opposite the oblong character here in red is the legend, "Land included in lease to Kern Trading and Oil Company, all patented except southwest quarter of northwest quarter of Section 27, Township 30, South, Range 22 East, and all unsold except part of Townsite of McKittrick and the northwest quarter of the northwest quarter of west half of west half of northeast quarter of northwest quarter of Section 7, Township 30 South, Range 22 East sold and deeded, and east half of Section 7, Township 31 South, Range 23 East sold under contract." The next legend is opposite an oblong rectangle colored drab, and reads, "Patented unsold lands not included in lease to Kern Trading and Oil Company." The next is a rectangle colored brown, opposite which is the legend, "Unpatented selected lands." The next. opposite the yellow color, says, "Unsurveyed lands."
- Q. Now, are the portions colored in red which are referred to in the legend as having been lost or sold the lands which you referred to in your letters as not belonging to the Southern Pacific Railroad Company, or a portion of them?
- A. I think a portion of them. There are other lands that are entirely outside of that land.

- Q. Referring to page 1765 of the record and to the letter of Mr. Markham of October 17, 1904, in which he states, "September 21st I wrote you on the subject of proposed lease from the Southern Pacific Company to the Kern Trading and Oil Company, asking that you kindly check this matter at an early date and [928] let me know from your standpoint whether there is anything in the lease that is really objectionable. Will you kindly advise status of matter at present time?", do you remember whether that letter was received by you?
 - A. I don't remember.
- Q. Well, referring to the letter which appears on page 1767.
- A. Yes; I must have been there, because I wrote on the 18th.
- Q. That is, on the following day you answered the letter?
 - A. Yes.
- Q. Now, in your letter of October 18th, appearing at page 1767, you say: "I am in receipt of your letter of the 17th inst. calling attention to the matter of the proposed lease from the Southern Pacific Railroad Company to the Kern Trading and Oil Company. Your letter has anticipated my letter to you on this subject. Mr. Dumble and I have had this matter under consideration in the past few days. The consideration of several matters in this connection is not yet complete, for the reason that Mr. Dumble is looking over his data with the intention,

as I understand it, of furnishing a new list of lands to be conveyed. The lease as now drawn conveys some lands outside of the grant and omits others that should be included. This is the most important matter connected with this lease, and I think the whole transaction can be closed as soon as Mr. Dumble reports." Now, does that letter bring back to your recollection whether or not, prior to October 18th, you had had a personal interview with Mr. Dumble?

- A. Yes sir. I must have.
- Q. And had there been any discussion, to your recollection, with Mr. Dumble, of this plat to which I referred a few moments ago?
- A. I don't remember that plat, but if one was made and in [929] hand at that time I have no doubt it was before us.
- Q. And do you know whether or not you gave any directions to anyone in your office to prepare a corrected list for the purposes of that Kern Trading and Oil lease?
- A. I don't remember of having that or of Mr. Dumble ever having furnished a new list of lands.
- Q. Now, you stated that "This is the most important matter connected with this lease, and I think the whole transaction can be closed as soon as Mr. Dumble reports." Did you have in mind at that time the possibility of closing the lease, signing it?
- A. No sir. I was sparring for time. I didn't intend to sign that lease at all until Judge Cornish had a chance to pass on it.

- Q. That is, you at that time hadn't heard from Judge Cornish in connection with the matter, had you?
 - A. No sir; he hadn't replied to my letter.
- Q. Now, referring to page 1769, to the letter of Mr. Dumble to Mr. Bancroft, who was then the acting general manager, dated December 7, 1904, in which Mr. Dumble states that he has had a conversation with you and that "It seems for reasons of policy regarding certain unpatented lands that it will be best not to execute the lease of lands between the S. P. R. R. Co. and the K. T. & O. Co. at present," do you recollect that conversation with Mr. Dumble?
- A. No, I don't. It is probably the same conversation that took place earlier that is referred to in these other letters.
- Q. That is probably the same conversation in which there had been a discussion as to lands left out and lands put in which should not have been so?
 - A. Yes; the mistake in the original instrument.
- Q. Now, how long, as nearly as you can fix it now from your [930] recollection, had Mr. Bancroft been here at the time when this letter of December 7th was written?
- A. Mr. Bancroft came, as I recollect it, in about the middle of October. I recall that fact because Mr. Markham resigned in the month of October and he left almost immediately.
- Q. Do you know what orders Mr. Markham gave with reference to the recognition of this Kern Trading and Oil lease before he left?

- A. I am not aware that he gave any.
- Q. Now, you learned, some time during the fall of 1904, that that lease was being recognized, did you not?
 - A. Yes sir.
- Q. And were informed, were you not, that the auditor had entered it upon his books as a going lease?
- A. So I was informed by the land accounts bureau, which was a branch of the auditing department.
- Q. And vouchers for pipeage charges under that lease began to come into your department, did they not?
 - A. Yes; they did.
- Q. And that was one of the matters that you called to Judge Cornish's attention when you talked with him, was it not?
- A. That was one of the principal things spoken of, for the reason that I had been led to believe that that lease was in abeyance, the whole thing was in abeyance. I had nothing from anyone, as I remember it, nothing from Mr. Markham and certainly nothing at all from Mr. Baneroft, to lead me to believe that it was a lease or considered as a lease, and the first intimation I had they were going ahead with came from that source.
- Q. Now, what did Mr. Markham tell you as to his authority over your department?
 - A. Mr. Markham took exception to some protest

that I put up [931] and the questioning of certain things that he had ordered done or intended to do regarding lands, and he informed me very pointedly that he was going to run the lands, that he was general manager of the Southern Pacific.

Q. By Mr. Mills-Southern Pacific Company?

A. Southern Pacific Company; and of course he was vice-president, as I remember it, of the Southern Pacific Railroad Company. In justice to Mr. Markham it must be said that the land matters were in an unnecessarily complicated condition. Mr. Markham had reason to believe from his position that he could issue orders and have them carried out regarding lands, having in mind the joker in the powers that were granted to me.

Q. By Mr. Lewers-What joker did you refer to?

A. I refer to the language which makes any acts of mine subject to the approval of the president or any vice-president.

Q. By Mr. McCormick—That language is in the resolution of the board of directors?

A. Yes sir. Now, so far as I was concerned, my connection with the lands was, by distinct stipulation made by Mr. Kruttschnitt, to be temporary. I was to be released just as soon as he could find a satisfactory man, and that language raised a very serious conflict of authority between Judge Cornish in the east and the manager actually in control on this coast, and I found myself right between the two, which I assure you was exceedingly unpleasant.

On this coast Mr. Markham was vice-president of the Southern Pacific Railroad Company and I think he honestly believed that he had a right to do anything with those lands that he saw fit—in a proper way, of course. My tenure of office and my authority there did not depend altogether on what the board of directors said—unofficially, I admit, but still it was none the less very controlling in my office. I belonged in the New York office, didn't belong here [932] at all; I came here and I came with instructions what to do.

Q. By Mr. Mills—From whom?

A. From Mr. Cornish. And, as I pointed out to Judge Cornish at the time I was appointed, and also to Mr. Kruttschnitt, my administrative duties here would very much complicate the other duties that been laid upon me by the New York office. I could scarcely see how I could carry both and it turned out I was right. It brought me into collision with different men out here unnecessarily, but as neither side would yield at all I was left here to fight it out the best way I could, and I got very little support from either side, and the only surprise in the situation is that I lasted as long as I did.

Whereupon the further taking of testimony herein was adjourned until 2 o'clock, P. M., at the same place.

On Tuesday, July 2, 1912, at 2 o'clock P. M., the further taking of testimony herein was resumed pursuant to the adjournment.

Whereupon, CHARLES W. EBERLEIN was recalled and cross-examination resumed, as follows:

BY MR. LEWERS:

Q. Mr. Eberlein, again referring to page 1769 of the record, where the letter of Mr. Dumble of December 7, 1904, is set out, when was it, if you can recollect, that that letter, or a copy of that letter, first came to your attention?

A. I don't know. It must have been very shortly afterward. I should judge so from the fact that those carbon copies were generally mailed at the same time the original is mailed.

Q. That is, the ordinary routine would be that that copy would be sent about the same time as the original would be sent [933] to Mr. Bancroft?

A. Yes sir.

Q. Now, were you in the office at that time?

A. That is a thing I can't fix. I know I went away. I fixed one trip. Whether I went through to Texas at that time I don't know. But I went out of town on the same train with Mr. Markham. I went as far as Los Angeles with him, and I laid over there and I believe I went on a day or two after.

Q. Was that the time he was going to Texas to assume his duties there?

A. That was the time he was going to Texas to assume his duties there; and we had quite a long talk on the way down to Los Angeles. I remember that very well.

Q. Now, that was in October, was it not?

Mr. Mills—I object to that as leading and suggestive. Let the witness state when it was.

A. I believe it was the latter part of October.

Q. Now, do you remember how long you were gone on that occasion?

A. I don't remember how long I was gone at that time. I don't remember how long I was in Portland. That was prior to this time. Only I know I was there. One letter was written from there. That is the only way I can account for my whereabouts during that part of the year.

Q. Well, have you any way of determining whether or not you were in San Francisco on December 7, 1904?

A. I have not any absolute way of fixing that. I probably was, because I went away, I am sure, that month. I think I was in New York in that month.

Q. Now, do you recollect, that is, is there any impression in your mind, brought out by the receiving of this letter of December 7, 1904? [934]

A. No, there is not anything connected with this letter. The only thing that I connect with Mr. Bancroft is a conversation I had with him in his office.

Q. Do you know whether that was before or after this letter was written?

A. I don't know; but it must have been about the same time, very near that time, I should judge.

Q. Now, was that conversation in regard to the same matter that is referred to in this letter?

A. It was in regard to several matters and this among them I am very sure.

Q. By Mr. Mills—That is, the matter in this letter?

A. The matter referred to in this letter, the execution of this lease.

Q. By Mr. Lewers—Now, what was said, if you recollect, about this lease by Mr. Bancroft?

A. Nothing excepting to say that he would be damned if he was going to mix up in any Southern Pacific squabbles. He was there to be as an interim officer, and he absolutely declined to "mix-up" as he colled it. He said he was not going to be there, he was just there as an accommodation, and he was not going to take part in anything that there was any dispute in or anything of the kind. The whole idea was that he was just simply there in order to have an official head, but that he was not doing anything and didn't intend to do anything, left everything. I think everything was practically in the hands of Mr. King.

Q. That is, Mr. Bancroft was looking after the actual operation of the road?

A. Yes. He was an operating man, and I knew him very well indeed from official connection with him back in Salt Lake, the Oregon Short Line, and of course he talked very freely to [935] me and he just simply said that he could not study out these things and he didn't think it was worth while, because he would not be there.

Q. Now, who brought up the matter with him?

A. I think I did.

- Q. That is, you made a statement to him with reference to it?
 - A. Oh, yes. He did not bring it up with me.
 - Q. What was it you told him, in substance?
- A. I don't remember what I told him, excepting just the fact that this lease was pending, and he immediately protested that he did not know anything about it, he did not want to know anything about it or go into it, and he said, "You know I am here just a short time, and the shorter the better, and somebody else is coming in here—just leave those things and take it up later on."
 - Q. Did he ask for any of the files?
 - A. No, he didn't ask for anything.
 - Q. And did you show him any correspondence?
 - A. I think not.
- Q. Was that a very long conversation between you in connection with this particular matter?
- A. No, not in connection with that particular matter. We talked over a good many things, a good many things not connected with the Southern Pacific at all.
- Q. Well, do you remember whether this letter of Mr. Dumble's of December 7, 1904, was referred to in that conversation?
- A. I don't recollect, and I don't suppose it was referred to any more than any other. I don't know that he mentioned Dumble or that I did either. There were a number of things that were pending about that time, and I went over to talk with him, give him

what information I had or could give him, as I [936] had done in times past when I was working under him, and he made that characteristic remark of his that he didn't want to mix up in anything of that kind and said he didn't intend to; it wouldn't do any good, because he would not be here to see anything through; he was just going to let it hang.

Q. Is it your impression at this time that you were in San Francisco at the time this letter of December 7, 1904, was written?

Mr. Mills—The witness has already stated that the record will show that he probably was here and believes he was here.

A. I can't be positive. I would state exactly if it were possible; but in my mind the idea is that I probably was about that time.

Q. By Mr. Lewers—Now, did you go to New York in the month of December, 1904?

A. I think I did. I think I was there and that I went in the month of December, because I was down there around the 1st of January, I know.

Q. Now, where were you when you learned that the patent had been issued for this land in 30-23?

A. I don't remember that at all. I don't know that it made any impression on me—the issuance of the patent. I presume I was advised of it by Chambers.

Q. Who was Chambers?

A. D. A. Chambers was the attorney for the company in Washington, D. C. He appeared for the company before the Department.

- Q. Is he alive now?
- A. No; he died several years ago.
- Q. Now, on page 1773 of the record appears a letter written by you to Mr. Cornish on September 3, 1904. Now, the opening paragraph of that letter or sentence is, "As you are [937] aware, the Kern Trading and Oil Company has been organized." Now, what did you mean by that statement?
- A. I think I had written him with regard to it before. That is the only construction I can place upon it.
- Q. But have you that letter that you wrote to him about it?
 - A. No.
- Q. And that letter was not in the file which you produced here?
- A. No. It probably hadn't any reference to this matter at all.
- Q. Now, you say in the second paragraph, "I am totally in the dark as to the objects, rights, etc., of this corporation. I have asked for information several times but it has never been furnished me." Now, do you recollect now from whom you asked that information?
- A. No, I don't. I don't know from whom I would ask it unless it would be the general manager.
- Q. Well, do you recollect ever asking Mr. Markham, that is, have you any recollection of ever asking him that question?
 - A. I can't fix a recollection of asking Mr. Mark-

ham or Mr. Kruttschnitt, either one; but I must have done so, I must have asked somebody what it meant. I was keeping track of everything here and reporting to the New York office.

Q. Well, did you get any information from any source as to the purpose of the Kern Trading and Oil Company?

A. No. That statement there I think must be correct at that time.

Q. You understood, did you not, in a general way that the Kern Trading and Oil Company was to take over land in that vicinity?

Mr. Mills—I object to that question because it is highly leading and suggestive. [938]

A. I think my general understanding was that it was to take over oil lands of the company.

Q. By Mr. Lewers—Did you have any understanding as to whether it was to take over any land to be prospected?

A. No; I don't think I had any—as I was here
 —No definite information on the subject.

Q. Then it was your understanding or impression that the Kern Trading and Oil Company was to take over oil lands?

A. Oil lands. And the impression was strengthened by the fact of the proposal to transfer the leases.

Q. That is, the existing leases?

A. The existing leases.

Q. Did you know at that time whether on any

of the land covered by existing leases oil was being produced?

- A. Yes. We were getting returns, as I recollect it, from some of these leases. They were not all of them being operated, but some of them were. That is my recollection.
- Q. Were you informed at that time as to the extent and nature of the oil development in the vicinity of Bakersfield?
 - A. You mean the general development.
 - Q. The general development?
- A. No; I do not. I was never in the field myself. I was familiar with the leases that the company had negotiated with individuals and corporations, but I think my information was limited to just about that. I had lots of other things to do.
- Q. Now, the next paragraph has perhaps been answered, and is this: "I was told in a general way that this company was organized for the purpose of taking over the oil lands of the Southern Pacific Railroad Company and operating the same." Now, when you made the statement you were told that in a general way, do you recollect whether you were referring to information given you by Mr. Markham or by some one else? [939]
- A. No; by some one else. I don't think Mr. Markham gave me any information at all. Now, this is merely a vague recollection. I think that information came around by the way of the auditing department.

- Q. By Mr. Mills-Of what company?
- A. Well, the general auditing department of the company. That includes, as I understand, the Southern Pacific Company and also the subsidiary companies.
- Q. Including the Southern Pacific Railroad Company?
 - A. Yes sir; I think so.
- Q. By Mr. Lewers—Now, you say that "A lease has been made for the term of ten years from the first of January, 1904, with a renewable term of the same period." By that you didn't mean that the lease had been fully executed, so far as you knew?
- A. No. That is pretty loose language. That was not an executed lease at all. It was a lease that had been offered but not executed.
- Q. Now, that lease that you there referred to was the lease dated August 2, 1904, that has been introduced in evidence?
 - A. Yes sir.
- Q. And you understood that that was to date from the 1st of January, 1904?
- A. That seems to be the understanding in this letter.
- Q. Now, you add, "The lease is made by the Southern Pacific Railroad Company to the Kern Trading and Oil Company, and covers all the lands now in the ownership of the company that either are or are supposed to be oil-bearing." That was your understanding at that time, was it?

- A. Yes sir.
- Q. "The consideration for this lease is a royalty of one-tenth of the gross product or, 'one tenth of the gross amount of moneys received from the sale of said minerals, substances [940] and products." In the latter part of that paragraph you were quoting, were you not, from the lease itself?
 - A. That is a quotation.
- Q. "This lease was concocted without any reference to me, and it has now been sent over for me to execute on behalf of the Southern Pacific Railroad Company." What did you mean by that?
- A. Well, it means that I was taken by surprise. I didn't know anything about this lease—of its being in preparation. I was wholly unprepared when Mr. Markham brought it to me. I didn't know anything about it.
- Q. Now, it was your understanding, was it, at that time, that whatever duties you had here in connection with the land department were derived by direct authority from Mr. Cornish?
 - A. Yes sir. That is the fact.
- Q. And that was the instruction which you had received when you first came out here to reorganize and consolidate these two land departments?
- A. That was the instruction, and that was insisted upon from the time I came until I returned.
- Q. Now, at the time when Mr. Kruttschnitt asked you to assume the duties as acting land agent, were you informed that any change would be made in the control over your actions?

A. No sir.

Q. And your understanding was that the same situation continued?

A. The same situation continued. It was rather peculiar, but I came out here by appointment of Judge Cornish, to report to him; he in turn was loaded with the responsibility for this reorganization, by Mr. Harriman.

Q. By Mr. Mills—Was Mr. Harriman an officer of the Southern Pacific Railroad Company at that time? [941]

- A. Of the Railroad Company?
- Q. Yes sir.
- A. I can't say as to that. I don't know.
- Q. Well, what was he as to the Southern Pacific.

Mr. Lewers—You will have ample opportunity, Mr. Mills, to inquire of the witness. I would rather you would not interrupt the answer.

Mr. Mills-Well, it would save a little time.

A. He was president of the Southern Pacific Company. (Preceding record read by the Examiner.) I came out here with instructions to report to him everything. I was told at the same time that I of course had no official connection out here and the task was a pretty delicate one as it would in the end require consolidation and letting out people and all such things, and the instruction was to get along the best I could. He didn't think I would, but then to do the best I could. And he said that he would send to Mr. Kruttschnitt a letter, he being the official

head here; that undoubtedly I would require an order occassionally to be issued and I would have to have some co-operation here locally, and that Mr. Kruttschnitt—he would arrange with him that when I needed anything I would go to him and get it. He furthermore said that between Mr. Kruttschnitt and Mr. Herrin there was probably some—each was a pretty strong man in his way and was holding onto the reins of authority as strongly as they could, and be careful not to go to one more than I would to the other, but if I had to go to anyone, had to make a choice, why to go to Herrin.

- Q. By Mr. Lewers—Now, what I am getting at is whether, after you were sent out here and when Mr. Kruttschnitt requested you to take over this other work, any modification was made, to your knowledge?
- A. Not to my knowledge. The relation as it existed when [942] I came was always insisted upon by Judge Cornish.
- Q. But prior to the time when you took charge of the land department as acting land agent do you know to whom Mr. Jerome Madden reported?
 - A. I think he reported to Mr. Kruttschnitt.
- Q. That is, Mr. Kruttschnitt was here as general manager at that time?
- A. As general manager. He didn't report to New York. None of the land agents did at that time.
- Q. So that your position was entirely different, so far as your controlling authority was concerned, from that occupied by Mr. Madden?

- A. Yes; mine was very complex. If I had been relieved from one or the other it would have been very much easier; it would have been better all around. If I had been transferred right to the Coast here and reported here things would have gone very much smoother.
- Q. Now, proceeding with the letter to Mr. Cornish of September 3, 1904, on the second page you say, "I don't know that there is any particular objection to it, as perhaps one-tenth of the product may be fair. The company now receives one-fifth in some cases and in other cases one-eighth, and this is at a still lower rate. However, I do not object to that. I am, however, somewhat slow about signing this document and tying the railroad company up for a period of years." Well, had you been convinced by anyone or as the result of investigation that perhaps this ten per cent royalty was not so unfair?
- A. No; but I realized my position here—a new man injected into this situation here—and I realized in all fairness that I might be mistaken about that, that there might be reasons, and good moving reasons, and good business reasons, [943] why one-tenth royalty should go, but I didn't know anything at all about it and I was kept in the dark, as I have stated, all along. I hadn't the means at hand, either from discussion or information from anyone or any source, to lead me to decide that question. I intended to leave that with my superior to decide.

Q. What was your own individual opinion at that time?

A. I don't think that I had enough information at that time to form an opinion which I should insist upon. That is the reason I put it in that way.

Q. Now, you proceed, "Of course I know that it is for the benefit of the Southern Pacific Company, but there is one feature which seems to me to be important. Inasmuch as the lease is made by the land department and the head of that department is taking the responsibility therefor, it does not seem proper that the Southern Pacific Railroad Company shall have nothing to say in regard to the disposition of its royalty oil. The lease provides that the oil may be sold and the one-tenth of the moneys received be turned over to the land department. It leaves the matter entirely in the management of the Southern Pacific Company, or the Kern Trading and Oil Company, I don't know which. In all events it is possible for some men not connected with the land department, nor with the Southern Pacific Railroad Company, to make a price on royalty oil belonging to the railroad company and sell it. There is no provision in the lease that the price to be received, in case the oil is sold, shall be the market price, or any other price. You can see that there is a wide open door for the disposition of the land department property at ruinous prices, thus depriving the land department and the bond-holders of a fair return for their property." Now, did you at that time consider that as a serious objection? [944]

- A. It was serious so far as I personally was concerned.
- Q. That is what I am getting at. As you looked at it individually?
- A. I had to look at it in a very restricted area. I knew nothing beyond the bare facts that they had submitted to me. I knew nothing about the matters of policy or necessity. Nothing explained to me. I was simply thrown upon my own resources and asked to take the responsibility of making this long lease on these terms. And all I*wished in that case was that all of these different matters should be put forth in the light in which they appeared to me and then let my superior officer take the responsibility. I didn't feel like taking it myself, from the lack of information—necessarily so, because I had been here less than six months at that time.
- Q. Well, had you sent a copy of this proposed lease to Mr. Cornish?
- A. I think not. I don't think I had. I had written him as these letters show.
- Q. Now, had you made this objection with reference to the taking the matter out of the hands of the Southern Pacific Railroad Company to Mr. Markham in any of your discussions?
- A. I don't remember whether there was anything said in the letters about that.
- Q. Well, whatever may have been in the letters, do you remember any conversation in which that was brought out?

- A. I don't know that I remember anything specifically on that subject. We had several discussions, but Mr. Markham was not disposed to discuss very much in regard to this, and I don't remember whether Mr. Markham made the suggestion that it was a family matter and I need not take any trouble about it. I intended to take trouble about it so long as I was the man who was going to be responsible for it. It looked to me like [945] a very serious thing for a man who was less than six months in as complicated a position as that is, and without any information except what he could glean, to take the responsibility for such a lease as that.
- Q. Now, you proceed, on page 1775, along the same line, "I feel that it is incumbent upon me to look somewhat into this instrument and into the future. I know that it is hardly probable, but still it is possible, that the control of this oil company may by some contingency pass out of the present hands, and if it should fall into hostile control the railroad company would get very much the worst of it." Now, that was a serious consideration in your mind, was it not?
- A. It seems to me that it was. As I say, it is not at all probable, but one of the possibilities in these days when government interference with every kind of corporate activity is in vogue, when we have the—I suppose the thing I had in mind was the action of the United States in regard to the coal roads. That was a pretty live issue with us back

1240

in the Union Pacific. Sometimes you might find yourself divorced from your source of supply of fuel; and that is what I had in mind there, and it seemed as though it were a reasonable inquiry to make as to whether the necessities of the railroad company in such a contingency had been carefully thought out and provided against in that lease.

- Q. And you had not received definite information as to what the circumstances were, had you?
 - A. None at all.
- Q. You say that Mr. Markham was not disposed to discuss the matter?
 - A. Not discuss land matters very much.
 - Q. Why was that?

Well, Mr. Markham, I think believed that the land [946] matters were not very important—they were not railroading. That has been the difficulty all along. The Congressional land grants attached to large railroad companies have always been looked upon by the managers of the companies as a kind of-well, I don't know; a sort of a vermiform appendage that might just as well be cut off, as though they were a nuisance and a burden and drag upon railroad management and operation, and therefore didn't require very much attention, and that most any fool could run a land grant. That last has been the policy of almost every railroad in the country. Now, the situation in regard to these quasi-public lands has become complicated, serious, and even dangerous, in the last ten years, so that it requires

a great deal more thought than Mr. Markham dreamed that it did, and that is why I wished, not to control him, but didn't want him to go and tumble into a hole, as I was very much afraid he would, and as to any friction between us that was the cause of it. He could not see it and didn't have time to bother with it, and would not. At the same time, when any man came in to talk with him about a matter he would talk with him, agree with him, and after the thing was all over, it came up to me, to ratify it, and sometimes I would not ratify it because I felt very sure that it was not the thing for Mr. Markham or the road.

Q. Still, was Mr. Markham impatient concerning your refusal to follow his suggestions?

A. Mr. Markham was one of the most pleasant men I ever met. We didn't agree as to these things—not that he was short, but he was pretty positive.

Q. He was insistent upon his views?

A. Oh yes, he was insistent upon his views and I could not make him see it my way always.

Q. And that is an explanation of the statement that you [947] made on direct examination that you had quite a number of disputes about the matter?

A. Yes; yes.

Q. Now, you proceed, "As I have already stated, this matter has been hatched for my signature without submission to me or without consultation. I know the answer, in case the question was raised, would be that it is all a family matter and that I

need not concern myself about it." Now, I understand you to say that that suggestion may have been made by Mr. Markham?

A. Yes.

- Q. "However, I take it that you are somewhat interested in this matter, and I want your advice as to what you think better be done to protect us against future complications. Do you think it would be wise and expedient and would it serve the purpose of protection if I were to demand action of the board of directors of the Southern Pacific Railroad Company ratifying and confirming the lease as it stands and directing the land agent to sign the lease? It seems to me that some such action is not only desirable, but necessary, inasmuch as it conveys control of the most valuable lands in the grant for a long term of years." You received no answer, by way of letter or telegram from Mr. Cornish, did you?
 - A. No sir.
 - Q. And you didn't see Mr. Cornish personally until some months after this letter was written?
 - A. Three months, probably.
 - Q. Now, did he, in the conversation you had with him when you did see him, refer to this letter?
 - A. Yes; he had been thinking that letter over a great deal.
 - Q. Did he have the letter before him?
 - A. I think so. That is my recollection. We had the lease [948] and the letter, and I brought everything else I had along.

Q. And you had your copy of the letter then, had you?

A. I had my copy and I had all this other material that I had received meantime.

Q. Had Mr. Cornish received any information concerning the matter from any other source?

A. That I don't know. I wanted some lead from him, but he was a very secretive man and he wanted to avoid every particle of trouble he could. He never wrote a letter, and it was frequently that matters here became acute and I could not get anything out of him. He never would go on record about anything by letter if he possibly could avoid it; and so I spent a great part of my time running back and forth between here and New York. In all the years I was there—I suppose I spent half of my time down there in the five years I was here.

Q. And then did he, in that interview or any other interview you had with him concerning this matter, inform you that he had received any information from any other source?

A. I think not. I don't think he had received any information. If he did he did not say anything about it.

Q. He discussed with you, did he not, the objections which you had raised to this lease?

A. Yes.

Q. And you went quite fully into that matter with him, did you?

A. Oh, yes; we went into it very fully, because

I had no desire to block anything out here, I simply wanted to be relieved of the responsibility, and he of course didn't want to be placed in the position of standing in the way of any action out here, but he didn't know anything about it. So I understood him. He did not know enough about it to direct anything to be done in regard to it, and I gathered from my [949] discussion with him at that time that he was as much in the dark as I was.

- Q. That is, he told you that he knew nothing about it?
- A. He knew nothing about it, and that accounts for his positive instructions, which was an unusual thing for him to give. He generally left you to work out your own salvation and not come to him, unless it got where nothing could be done.
- Q. Now, did you, in that conversation, call his attention to what you refer to in this letter, the danger of the company, Southern Pacific Railroad Company, losing control of this land?
- A. Yes; I think we touched on that, but I don't remember of anything particularly from him on that subject. I don't think those things appealed to him as much as they did to me.
- Q. Well, was there anything said in that conversation about a meeting of the board of directors as you suggested in your letter?
- A. I suggested that, and I suggested it down there, but he didn't seem to think that it was necessary or anything that he wanted to mix up in. This

action was taken by the gentlemen out here, and he was the president, as I recollect it, of the Southern Pacific Railroad Company, and without any information on the subject, and I think that his policy was not to do anything or have anything done until they did bring it up, until they brought him into it. That was the way he worked, and I don't think they ever did.

- Q. You say "until they brought him into it". Who do you mean?
- A. I mean the gentlemen on the coast here in charge, Mr. Markham and the board, whoever they were. The matter hadn't come to him by any reference, as I understand it.
- Q. Now, you say further, in your letter of September 3rd to Jugde Cornish, reading from near the bottom of page 1775, "This lease has been lying here for some time during my absence [950] and I may be called upon for it at any time. I would therefore esteem it a great favor if you would give me any suggestions you may have by wire. I can stave off the delivery of this document for some time yet, I think, for the reason that if the knowledge of this lease becomes public property it will probably cause us a great deal of trouble in the United States Land Office and may result in the loss of a large body of adjacent lands which may hereafter turn out to be mineral and oil-bearing. I found on taking charge of this office that a large body of our lands, especially indemnity lands in the Coalinga, McKittrick and

Sunset fields, had been withdrawn by the United States from entry pending examination as to their mineral character. I have worked very hard and very steadily to get the United States to complete its report and dispose of this matter. I have just succeeded in getting the special agent in charge to make a report releasing our land from interdictment." Now, in your conversation with Judge Cornish did you discuss with him the matter I have just referred to, the effect of this lease upon pending applications?

A. Yes. That was the thing that was more interesting to him than anything else. I don't think he bothered himself about those details that I mentioned. I think he thought that was a matter to leave to the gentlemen in charge here. But as to that matter, he was very positive.

Q. Now, at the time when you had the conversation with him in New York, the patent had been issued, had it not? It was issued on December 12, 1904.

A. Yes; it was probably issued about the time I was there—a little before.

Q. Did you know at the time you had the talk with Judge Cornish?

A. I can't tell you whether I knew.

Mr. Mills—I don't want you to be led into any error, but [951] you have stated in direct examination that you were down there in the late fall or early winter.

Mr. Lewers-I don't want to be understood as try-

ing to lead the witness into any statement, because I have no desire to try to eatch him or anything of that sort; I want the fact.

A. I think when I speak of "early winter" I would say that in my mind December would be the month that would cover the time that I was there, and when we talked this over; but whether the information of that patent had reached me at that time I don't know, because the patent would be sent direct; if it was issued the 12th it may have been mailed the 13th or 14th and passed me and that information may not have been in hand at the time I talked with him. It may, though. I would not be sure of that.

Q. Now, did you have in mind at that time, from the standpoint of your official duties, the possible selection of any other lands?

A. I don't recollect that. "The possible selection of any other lands"?

Q. In that vicinity.

A. Not unless the lands that were then unsurveyed were surveyed, and then we would certainly attempt to select them. As I remember it, there was a body of land lying south, I believe in that same indemnity, that was at that time unsurveyed.

Q. You knew that, did you not?

A. Yes sir. That appeared on those maps that were made.

Mr. Mills—I believe those lands were not surveyed until 1907.

Mr. Lewers—Oh, yes; there is no dispute about that. They were not surveyed.

Q. You knew at that time that they could not be selected until surveys were made, did you not?

A. Oh, yes. [952]

Q. Now, when you referred to the possible loss of a large body of adjacent lands, did you mean the lands in Township 30-23 or did you refer to some other lands?

A. I assume that I referred to lands in 30-23.

Q. By Mr. Mills—The lands in this suit, or under application, do you mean?

A. Those that were under application.

Q. By Mr. Lewers—That is, when you wrote your letter of September 3rd, these, of course, hadn't been patented?

A. Hadn't been patented; and that, of course, was what I was anxious about at that time.

Q. Now, you say that you worked very hard and steadily to get the United States to accept this report and dispose of this matter. What do you mean by that?

A. I mean I had pounded D. A. Chambers to make him get after the Interior, Department, in the first place, to get a detail of some one to examine them, and then to get him to complete his work.

Q. Then you go on and say, "I have just succeeded in getting the special agent in charge to make a report releasing our lands from interdictment." What do you mean by that?

- A. I mean by that I was working through Chambers, and got word from him to that effect. I was not working through the agent, because I never saw him or had any communication with him.
- Q. "If it becomes known that we have executed a lease of lands interspersed with those already under selection by us, and that the lease is for oil purposes, it seems to me that it will immediately encourage oil speculators to file upon the lands so selected and that the government will have good ground for refusing patent, inasmuch as we practically fix the mineral status of the land by this lease." You understood at the time you wrote this letter, did you not, Mr. Eberlein, that the lease was [953] for oil purposes?
- A. I can't say that I understood much of anything about it.
 - Q. Well, was that your impression, I mean?
- A. It may have been my suspicion that it was. But as I have said before, I hadn't a syllable by which to guide myself. These gentlemen were not taking me into confidence at all, and I think it would have been a little too much for me to say then or to say now that all the land that was in that lease was oil land. Some of it was. As to the rest I can't say that I possessed information on which to draw any conclusion about it. If what indirect information I had was correct, the lands were to be transferred to an oil development company, and what I refer to here, badly expressed as it is, is my fear that the

government would take the very narrowest view possible of the situation and simply say, "Here, you, the land agent, land officer of the Southern Pacific, are making a lease of these lands lying here to an oil development company and at the same time you have got an application for lands non-mineral lying adjacent." I simply say that my experience with the Department has always been that it takes very much less than that to make them hold things up and perhaps take things away from you, because a railroad company has very little chance in its dealings with the United States General Land Office.

Q. Is that what you meant when you stated, "Inasmuch as we practically fix the mineral status of the land by this lease"?

A. That is just it. It raises a presumption, and what I was afraid of then I think has been fully confirmed now. It does not say, I don't mean to say, or be understood, that those are oil lands or I thought they were oil lands. I merely say the two acts taken together create a presumption which the government would not be slow to take advantage of. [954]

Q. And was it your belief at that time that that presumption was an improper one, a false one?

A. Yes sir.

Q. Now, turning to page 1793, I call your attention to a note of February 22, 1908, written by you to Mr. Conlin. Where were you when that note was written, if you remember?

A. I believe I was in New York at that time.

- Q. And Mr. Conlin was in San Francisco at that time?
 - A. San Francisco; yes sir.
 - Q. And what position was he then occupying?
 - A. Assistant to acting land agent.
- Q. Now, at that time, in February, 1908, where was this file of papers, including the lease?
 - A. That was in New York at that time.
 - Q. You had it with you?
- A. I had it there; had taken it, I believe—The nearest I can fix it was that I took it away from San Francisco with me in 1906, leaving a copy of everything there in the private safe.
- Mr. Mills—Have you copies of these papers in your possession ?
 - Mr. Lewers-Of which papers?
- Mr. Mills—The papers that he refers to that he took to New York.
- Mr. Lewers—I will say that we have found carbon copies of a portion, but we have no copy of these letters to Judge Cornish or of the letter of September 10th to Mr. Markham. In fact, we have only copies of a portion of the files introduced in evidence.
- Mr. Mills—I want to state to counsel that I was unaware, at the time these were introduced, that you had any copies whatever. I won't ask you to produce them, if you will waive [955] notice to produce now the copies which you hold.
- Mr. Lewers—We will produce them in due time, together with a lot of other things.

Mr. Mills—Then that is all right. If I had known it at that time I should have served notice to produce.

Mr. Lewers—We have no objection to anything of that kind.

- Q. Now, after you wrote that note to Mr. Conlin on February 22, 1908, when did you first see it again?
 - A. When it was produced here in court.
- Q. Then that was not part of that file that you had in your possession?
- A. No sir, not at all. I had forgotten all about that.
- Q. Now, were there any other letters or papers introduced in evidence here that were not obtained from your possession?
- A. I think that one of these letters that have been referred to and that attempted lease are all that I had.
- Q. You had the plat, did you not, in your possession?
- A. Yes, I had the plat with the lease. The plat and these letters that refer directly to this attempted action, and the action of myself and Judge Cornish in this matter.
- Q. Now, to get at that more specifically, will you turn to the index to the testimony of May 16th and 17th, where there is a list of exhibits—"Exhibit DD, certified copy of resolution of the board of directors of the Southern Pacific Railroad Company, dated September 2, 1903, appointing Charles W. Eberlein acting land land agent." Was that obtained from your possession?

A. That was not in my possession.

Q. "Exhibit EE, letter Markham to Eberlein, August 2, 1904".

A. I am just assuming these are the same letters that are spread here in full.

Q. They are.

A. If that is the case, that entire list, as I take it, [956] were in my possession and produced in response to this summons.

Q. By "that entire list", do you mean, "Telegram Stone to Eberlein, August 4, 1904, Telegram Eberlein to Stone, August 4, 1904, letter, Stone to Markham, August 5, 1904, letter Markham to Eberlein, September 5, 1904".

A. Now, let me see about that. Yes; that is right.

Q. "Letter Eberlein to Cornish, September 10, 1904, letter Eberlein to Markham, September 10, 1904, letter Markham to Eberlein, September 14, 1904, letter Markham to Eberlein, September 21, 1904, letter Eberlein to Markham, September 21, 1904, letter Eberlein to Dumble, October 7, 1904, letter Eberlein to Dumble, October 8, 1904, letter Markham to Eberlein, October 17, 1904, letter Eberlein to Markham, October 18, 1904, letter Dumble to Bancroft, December 7, 1904, letter Eberlein to Cornish, September 3, 1904"?

A. Yes sir.

Q. Those were all in your possession?

A. Those were all in my possession.

Q. I understand that you testify that June 1, 1908, you resigned your position as acting land agent?

- A. It took effect at that time.
- Q. It took effect at that time?
- A. Yes sir.
- Q. For how long a period prior to June 1, 1908, had you been absent from San Francisco, approximately?
- A. I can fix it pretty definitely. I was called to New York by telegram from Mr. Harriman early in October, 1907. I arrived there Friday, I think before that Monday when the panic began. I had an engagement with him at that time, and by reason of the upset in financial conditions there I had to remain there until such time as he could see me, and I didn't return here until I think the following spring. I believe it was in March, [957] I can't fix that off-hand.
 - Q. That would be March, 1908?
- A. 1908. And I settled some things here and went back to headquarters. I had had correspondence with Mr. Harriman in September before, telling him that my work here was finished, that I had rehabilitated these departments as far as they could be and I wanted to be relieved, declined to accept any further service as manager of these land departments, and he called me east at that time and I was attached to that office from that time on.
- Q. By "that office" you mean the New York company?
 - A. Yes sir.
 - Q. By Mr. Mills-Of what company?

- A. Of all these companies; the Southern Pacific Company there—
 - Q. And the subsidiary companies?
 - A. And the subsidiary companies.
- Q. By Mr. Lewers—Then some time in March or April, 1908, you we:
 - A. Yes.
- Q. And later you took a trip to Europe, did you not?
 - A. Sailed on June 6th.
- Q. Now, prior to the time when you were called back to New York by Mr. Harriman, as you have related, where did you keep this file, including the lease and this correspondence?
- A. My recollection is that they were in my desk there in the New York office.
- Q. But I mean prior to that time. When did you take them away from San Francisco?
- A. Oh, I believe they were taken away in 1906. Just after they were copied here I took this file that I have produced here with me down there. We didn't have any very good place to keep [958] things here. I considered that very important, so did Judge Cornish, and so I took it down there.
- Q. Now, going back to the beginning: After you had learned of this lease, or had been requested to sign it on August 2, 1904, when was it that you began to keep the file concerning this lease separate?
- A. I think I kept that together right along. I think it was on my desk right there for some months, right in my desk. This correspondence was coming

and going, and I don't think it was put away at all; I kept it there myself.

- Q. Referring to this letter of September 3rd, to Judge Cornish, was that kept with that correspondence?
 - A. Yes sir.
- Q. And for some time you say it was kept in your office in your desk?
 - A. Right in my desk, under my own hand.
- Q. That is, separate from the usual files of the office?
 - A. Oh, yes; it was never kept there.
- Q. What was your reason for not keeping the files out in the general files?
- A. I didn't think that was a proper thing to be public property, for the reasons that I have stated. It was a matter that was in abevance, for one thing, and was kept at my desk while that was on. It was a matter that might come up any day, did come up on almost every day in some shape over the telephone or by letter. I handled that myself; it was not in anybody else's hands. Even when I went away I would not allow anything to be done with regard to that. I considered it a very important matter, because it might not only compromise me but compromise my superior officer, who was responsible to Mr. Harriman and the board back there for land affairs. I felt that inasmuch as he was president of the company it was his business as much as any- [959] body else's and that if anything went wrong he would be criticised as thoroughly as anybody else. Then when the

vouchers began to come in I thought it assumed a pretty serious aspect. I didn't like that part of it at all.

Q. What vouchers are you referring to?

A. I mean the vouchers for pipeage, that were rendered, as I understood it, in accordance with the terms of this supposed lease. Now, that was done without any discussion of the matter with me at all, and showed a disposition to jam that thing through regardless of anybody, and it behooved me to be very cautious.

Q. That is, were you afraid that vouchers might be recognized by some clerk in the office?

A. That is exactly what I was afraid of, and I took very good pains to instruct those in the office who might come in contact with anything of that kind that approval in any way of that lease, or any voucher or anything by which we would be held to have ratified and confirmed that lease, would be met by immediate dismissal, and they were very careful.

Q. Now, when you went to New York, either in December or in January, in 1904 or the first part of 1905, whichever it was, you took this file with you, did you not?

A. I did.

Q. And when you returned you brought it back?

A. Yes sir.

Q. And where was it kept when you brought it back?

A. When I brought it back I got a box in a safe

deposit vault of the California Safe Deposit & Trust Company and kept it there.

Q. And how long was it kept there?

A. Kept during that year; and, for some reason or other, possibly brought up to add something else, or something, and [960] happened to be in the office at the time of the fire. That seems to be the case, for the reason that the letter to Judge Cornish was not brought along with the file for some reason or other but remained in that safe and was not burned.

Q. That is, your carbon copy was found in the safety deposit box of the California Safety Deposit & Trust Company?

A. Yes sir. That accounts for its condition, which is not carbonized.

Q. Now, after the fire where was the rest of the file found, did you say?

A. We had a steel box or safe in the vault. I think it had four compartments, four doors. And in that safe were kept—well, I kept some personal papers of my own in there, this file, and Mr. Stone had access to that particular compartment with me. I think we had two compartments there in which we kept papers that were not kept in general files.

Q. Now, after the fire, were you present when that vault was opened?

A. No sir, I was not.

Q. Who delivered these papers to you?

A. I can't recall that, because I was sick.

Q. That was when you had pneumonia, was it not?

A. I was just recovering from pneumonia, and I had a pretty bad shaking up during the fire and was laid up in Alameda for some days. I didn't come to this city at all for some days. And Mr. Stone was very much knocked out. So that things devolved largely on Mr. Conlin, and that vault was examined on Monday; Mr. Conlin and another employee came over here on Monday after the fire and found cracks around the steel door, from which smoke was coming, and under my orders they went over and attempted to stop the combusion inside by sealing up the crevice with cement. And the next day it had broken out in [961] another place and we went to the chemist of the company and he examined it and finally on Thursday, I think it was, he advised that they attempt to break in and try to save something, because combustion was going on in there and they could not tell the extent and things were being entirely destroyed. And we discovered at that time that the vault was just a sham, just a steel wire stretched from floor to ceiling and cement about an inch thick pasted over outside of it. And they battered the side of it down and made a rush to get what was in there, and all the wood-work collapsed and precipitated the steel cases with all their contents into the burning pile and the destruction was just about complete. They could not save anything. The only thing that was saved, that I remember or know of were the contents of this same steel box, in which, of course, there was no-very little combustion, and it didn't receive any air from the outside. When it

cooled off some days later it was opened. But I was not present at the time.

Q. Who opened the box? Do you know?

A. I don't know that, because I had an assistant at that time by the name of Kelly, and Kelly and Conlin and several of the other boys were here and took charge of it, and which had charge of that I don't know, but they were there when it was opened.

Q. Did you see the contents of that box before copies began to be made?

A. My remembrance of that is that those papers were brought out in a carbonized and very fragile condition and had been pasted on sheets when I got there, or attempted to be; and I directed my stenographer to make copies of those, and I remember his coming to me afterwards with a pile of something that was—oh, just bits—and asked what he should do with [962] it, and they were in such condition that it wouldn't have been any use at all and I understood it was the remains of this file.

Q. What did you tell him to do with it?

A. Oh, just throw it away. The stuff he brought me was absolutely of no use. I can't say definitely whether it was just this, but I understood that was the remains of this file that he had been copying under my orders.

Q. Now, did you check over the contents of that box in any way to see whether anything was missing, or check over the copies after they were made to see whether anything was missing?

A. No; I don't think I was present at the time be-

fore the copies were made—I may have been—and brought to me; but the work was done under the immediate direction of Mr. Stone and the copies were made and compared and brought to me. That is all I remember of that particular matter.

Q. At the time they were brought to you did you make any examination of them?

A. No more than to read them over.

Q. Well, at that time did you determine whether all the letters had been saved and copied or whether any were missing?

A. We were so topsy-tervy in those days that I may not have given that much attention, but I just assumed from the stuff that was brought to me that it was the file that had been there. I can't see any reason why it should not contain the letters that were in the file.

Q. Was it your impression at that time that it did contain the letters that had been in the file?

A. That is what I think now. I have no reason to suppose anything else.

Q. After you had received those copies made from the charred remains what did you do with them? [963]

A. I kept those in my own possession. Just where I kept them I can't tell you, for the reason that for weeks we were crowded into a room on San Pablo Avenue in Oakland. I think there were some fifty people in that one room, and fourteen typewriting machines and two multigraphs, and if there had just been straw on the

floor you would have thought you were inside of a menagerie, from the way it smelled. Those are the conditions under which we lived for several months, and the care and work we kept things in I can't begin to tell you now. We had no safe deposits as I remember and we kept things as best we could, and that whole time is a nightmare, and I guess every one in the Southern Pacific was in just the same condition.

Q. After the condition had been removed, that is after you got quarters other than those in Oakland, where did you keep those papers?

A. Those papers went with me, I think in May, to New York. I went in May, 1906, to New York and I didn't return until some time the latter part of Septemper.

Q. And they were with you during that time? .

A. They were with me there and I think those were left there; that is my belief now, that they were kept there because they were safer.

Q. That is after you returned in 1906, was it? You went to New York what time in 1906?

A. May, 1906.

Q. And were there until what time?

A. Some time in September, 1906.

Q. And on your return in September, 1906, your impression is that you left those papers in New York?

A. Yes; left there for safe keeping.

Q. And where were they kept there? [964]

A. In my desk.

- Q. And when did you return to New York, as nearly as you can fix it?
- A. I don't think I was in New York until the following fall.
 - Q. The fall of 1907?
 - A. 1907.
- Q. And had the papers remained in New York all of that time?
- A. Yes sir; I think they remained. We had copies here.
 - Q. You had copies of them?
 - A. Yes; left them here for Mr. Stone's guidance.
 - Q. And where were those copies kept?
- A. Mr. Stone must have kept them until some time when we had some vault space. I can't tell you about that, because the details of the office management I was obliged to leave to subordinates. I was loaded with too many things and was kept moving around too much. But as to these original papers, especially that original lease, I knew that Judge Cornish attached very great importance to that and I took it down with me and it was kept there. I am very sure it was kept there right along.
- Q. But was there a copy of that lease kept in the San Francisco office?
 - A. Yes sir.
 - Q. Together with copies of all of the other papers?
 - A. Of all the other papers I had.
- Q. Do you know what has become of those other copies? Have you ever seen them since?

A. I have seen them since while I was here in 1907.

Q. Well, did they remain here when you turned over the office to Mr. Conlin? [965]

A. Oh, yes; must have been.

Q. Have you seen them at any time since that?

A. Oh, no; I have not been in the office since early in March, I think, 1908. And I don't know that I saw them at that time, because I was here a very short time. But they must be in the office there, because I had that done so as to leave Mr. Stone in full possession of the facts, so he could refer to anything, and I believe there was a duplicate made of that map at the same time.

Q. Well, are you certain that there was a duplicate of the map, lease and all this correspondence kept here?

A. Oh, yes; I am positive there was right here, with these papers, a carbon copy of that lease, and the reason it was made was that there should be a copy left in the office for the protection and information of the office.

Mr. Lewers—Have you any other papers that you have not produced yet, Mr. McCormick?

Mr. McCormick—No sir; we told you every paper that was given to us with the exception of one paper we have now. That is a typewritten copy of the lease, and it was at the hearing in Los Angeles.

Q. Is this the paper you have reference to, Mr. Eberlein?

A. That is the copy I have reference to.

- Q. You are now referring to Exhibit YY?
- A. Yes sir.

Mr. McCormick—Mr. Mills wanted to save the original as much as possible and asked you to stipulate to put in a copy in its place, and this is the copy that was put in.

Mr. Lewers—That explains that. But have you in your possession this duplicate file, or any portion of it, of letters?

Mr. McCormick-no sir. [966]

The Witness—I assure you that that duplicate is or should be in the safe of the land department.

- Q. By Mr. Lewers—Now, in that connection were there not a large number of papers pertaining to the Southern Pacific Railroad Company indemnity lands kept in files in the office while you were in charge?
 - A. You mean filing cases?
- Q. Filing cases in the shape of a large book that opened on the end?
 - A. What kind of papers?
- Q. Pertaining to the Southern Pacific Railroad Company's indemnity lands?
- A. Well, I don't identify anything from that description. We kept a lot of—As far as those office details are concerned, I am at a loss. I can say, though, that I ordered steel filing cases that were kept in the vault, where all contracts, leases and stuff of that kind was kept. As to these papers referring to indemnity lands, I don't know what you mean.
- Q. Perhaps I have not made myself clear; but, first of all, do you recollect whether, during the time

you had charge of the office, any use was made in the department of these filing cases that are in the shape of a large book and that open on one end or would open corresponding to the edge of a book?

A. I don't think I can fix the thing in that way. Our filing system, as I recollect it, there, was the keeping of subjects, and they were pinched together with some kind of a clasp. Now, what they were kept in I don't know. I called for files and they were brought in. I rarely saw the workings out beyond.

Q. That was a detail that you left to others?

A. I had two assistants, and I held them strictly up to keeping the office going. I had to leave a great deal to them. [967]

Q. Now, did you have any file cover for these papers that you kept in this private file?

Mr. Mills—I don't want to object, but I think you are incumbering the record with immaterial matter, and I will have to object if you continue this any longer.

Mr. Lewers—I think you will find it will be very material. I will state the purpose of it if you desire.

Mr. Mills-I wish you would.

Mr. Lewers—The purpose is to show that subsequent to the time when Mr. Eberlein left here there was probably in existence a certain file and that that file has been removed by some person other than Mr. Eberlein from the file.

A. I will just say that we did have a system, as I recollect, there, and I—I think a manila folder something like that, folded there, and things were slipped

in, and on the outside an endorsement—that was done in some cases I know. Whether in this case I don't remember.

Q. Well, did you have any such folder for your private file?

A. I don't remember that, but I think it is altogether likely, to keep these papers all together, keep them from becoming separated.

Q. I call your attention to the letter Exhibit XX, from Mr. Calvin, of December 26, 1907, and particularly to the file-mark, "B, 30, 20, 22", and I will ask you if you know whether that was a file-mark employed in your office or was the file mark on the letter as it came from Mr. Calvin's office?

A. Well, I would assume that that was a file mark that was put on in the land department. It would hardly be on there coming from the other office, though that I can't say. It does not mean anything to me. I don't know.

Q. Now, I call your attention to the letter written by you on October 7, 1904, to Mr. E. T. Dumble, marked on the top, [968] "From file No. 47." Do you know what that file is?

A. No, I don't.

Q. Do you remember the system of file numbers that you had in your office at that time, or did you have anything to do with that?

A. I don't think I had anything to do with it. I know that the filing system was first class bad, I thought, and we changed it several times. But those details I don't know anything about.

Q. Then are you able to state whether you had a file in there "No. S-60"?

A. No. That means nothing to me. I don't know whether that ever came out of the land department. "Records McKittrick, Coalinga oil fields." That may have been something Mr. Stone inaugurated without reference to me, or my knowledge. I don't know what it means.

Q. The card which I have just shown you and which you have referred to is the one marked "Defendants' Exhibit No. 1", is it not?

A. Yes sir.

Mr. Mills-Was that offered in evidence?

Mr. Lewers—"For identification". It will be offered in evidence.

Q. Now, was your private file—I am not referring to the duplicate—returned to San Francisco at any time before your resignation in 1908?

A. You mean these papers I have brought in here?

Q. Yes.

A. I think not. I don't think it was. I don't think there was any necessity for it.

Q. Then in 1908, while you were in Judge Cornish's office in New York, did you have any other files belonging to the [969] land department, or papers?

A. Oh, there were papers sent back and forth after files there, but I don't have anything particularly in mind. They were sending files on to me continually for one purpose or another. For instance, there would be a demand for information before the board there in regard to some land matter, very often timber matters. In those cases the files were sent on. I remember a number of cases of that kind. But I think they were always returned.

Q. Now, did you have on hand any files in the New York office that belonged to the San Francisco office, at the time just before you sailed for Europe?

A. I don't have in mind anything that was there. There may have been some things left there that probably were not important or hadn't been returned. I don't know. We had clerks there that looked after that thing.

Q. Well, do you recollect turning over any papers at that time for transmittal to the San Francisco office or be left with Judge Cornish?

A. I have no distinct recollection about that; but I think it is altogether probable that I cleaned out my desk and sent back stuff that was not important at that time, unless they happened to be things that were apt to be called for there.

Whereupon the further taking of testimony herein was adjourned until Wednesday, July 3, 1912, at 10 o'clock A. M. at the same place.

On Wednesday, July 3, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed pursuant to adjournment: [970]

Whereupon, CHARLES W. EBERLEIN was recalled and cross-examination resumed, as follows:

The Witness—If it is just as convenient for you now, may I offer a correction to the testimony.

Q. By Mr. Lewers—If you have any correction to make, you may proceed.

A. I have testified in regard to the letter on page 1793, written by me to Henry Conlin, dated February 22, 1908. I don't know that this correction is important, but as nearly as I can give dates I want to do it. I find by reference to private memoranda which I have just found that that letter was written in San Francisco and not in New York. Evidently my testimony arose from the fact that I knew I was in New York about that time. The fact is that I left San Francisco on that day, and therefore that note must have been written here.

- Q. And that accounts for the fact that that was not written upon a letterhead of the New York office, does it?
- A. Yes sir, that does. I came from New York on a hasty trip to break up my house here and move things to New York as I expected to remain there, and I was here a very short time and was very busy. I knew I was in New York that month, or about that month, or about the first, or somewhere in there, anyway, and I thought I was there when I wrote that note. I was here.
- Q. Now, at the close of your testimony yesterday I think we had reached a point where you had stated that this private file was in New York in 1908 at the time when you resigned?
 - A. Yes sir; that is true.
- Q. Did you have a desk of your own in the New York office?

A. Yes; I had a room there and a desk which I occupied when I was there.

Q. At 120 Broadway? [971]

A. At 120 Broadway. And in my goings back and forth I left papers behind me. Sometimes I think some papers were left in the safe there, but I don't think these were.

Q. Now, was this file that you had in your desk in New York at that time and which has been produced here, the entire file in reference to this matter?

A. You mean this file that I have produced?

Q. Yes.

A. I believe that is all.

Q. Well, now, was there not some correspondence with reference to claims for pipeage charges sent in from the auditor's office?

A. There may have been, but if there were they must be here.

Q. By Mr. Mills—By here where do you mean?

A. San Francisco.

Q. By Mr. Lewers—But did you not have letters of that kind in that file?

A. I don't think there was. I don't recall it, at least. I will just state generally that my recollection as to files and times is necessarily pretty hazy. I was jerked back and forth between here and New York so frequently, and there were so many things called for down there, and files had to be sent, that I always had to go loaded with a great deal of lumber, because I was expected to answer all kinds of questions when I got there, and my recollection is that there was prob-

ably a vast amount of stuff in the files of the New York office. I believe they were weeded out occasionally and sent back. That was attended to there; I didn't attend to that myself.

Q. Now, after you left New York on June 6, 1908, on your trip to Europe, where was that kept?

Mr. Mills-Which file do you refer to?

Mr. Lewers-There is only one file. [972]

Mr. Mills—Do you refer to the file he had in New York?

Mr. Lewers—Why, certainly. Mr. Eberlein understands, if you don't.

A. That must have been left among my effects there. I left a lot of stuff behind me there in storage.

Q. Well, was it left in the office at 120 Broadway, or elsewhere?

A. No, no; it was in my possession.

.Q. And you say you left a lot of your effects in storage?

A. Yes.

Q. And do you remember your getting that file on your return from Europe?

A. I presume I went over a lot of things, because I moved a lot of stuff from there out to Ohio. All my effects that I had there I moved at that time and brought them out there, and that among them.

Q. And did that file remain constantly in your individual possession after that time?

A. Yes sir, until the day it was pried out of me down in Los Angeles.

Q. And you say you went to New York some time either in the fall or early winter of 1904 and '05?

Mr. Mills—I must object to that question, because it is a mis-statement of the evidence.

Q. By Mr. Lewers—It might possibly have been some time in January, might it not, 1905?

Mr. Mills—I object to that question as extremely leading.

A. I know that I was down there around December, and January of that year, and I believe it was December, but I cannot be positive. It is a long time ago.

Q. By Mr. Lewers—How long did you remain there, as nearly as you can recollect, on that trip?

[973]

A. I can only judge by the length of time that it usually took me when I was there, and I must have been there some weeks, I think.

Q. And your headquarters were in the office of Judge Cornish?

A. Yes sir; always. They were my headquarters before I ever came on the Southern Pacific, and there were matters which I had in charge even after I came on the Southern Pacific, and that accounts for my long absences from here very often, and I had all kinds of papers and reports that I had made of everything down there.

Q. Now, had any of these claims for pipeage charges come in before you went to New York?

A. That is my impression now. I can't swear definitely as to that, but that is my belief, that that

is one of the things that was under discussion at that time. The fact that they had come in showed a disposition to not let the matter sleep but to go on with it as a lease.

Q. Well, you had been informed, had you not, that the lease was being treated by the auditor as a going lease?

A. My remembrance is that that is the way I got it. I don't remember any distinct conversation with the auditor about it, but I do remember of those bills coming in, and I suppose there must be files of those bills here in the office.

Q. Now, you discussed that matter, did you—these pipeage charges—with Judge Cornish?

A. Yes sir.

Q. And did you inform him what you had learned as to this lease being treated as a going lease?

A. Well, that is all I could inform him; but that he was informed of, because it was the subject of conversation at different times after that. [974]

Q. Do you know whether he issued any orders to Mr. Markham or to anyone else with reference to recognizing or not recognizing that lease?

A. Not that I know of. I should doubt it.

Q. You never heard of any being issued, did you?

A. No sir.

Q. Did you not have in your possession or in your office in New York, at the time when you went to Europe, or shortly prior to that, many other papers concerning other matters in the land office in San Francisco?

A. Oh, I think there was a considerable accumulation of stuff of one kind and another there. That is my recollection now. It must be remembered that I had been absent from San Francisco practically since September and had only come back here on a very hurried trip, and that I was endeavoring to carry on business in both places, and that of itself accounted for a considerable accumulation of stuff down there; but I believe that the clerks there bunched up a great lot of stuff and sent it back, though I didn't superintend that and can't say.

Q. Did you instruct them to do so?

A. I think so. I think that was the thing I wanted done at that time. But they may have had files that they had kept there for their own or for Judge Cornish's information. That is something entirely within their control and not mine.

Q. Was there not some correspondence with reference to this Kern Trading and Oil lease that you turned over to the New York office shortly before you went to Europe?

Mr. Mills—I object to that question as leading and suggestive.

A. Well, I don't know what it was. If there was I don't remember it at this time. [975]

Q. By Mr. Lewers—I call your attention to government's Exhibit BBB, a letter of December 27th written to you by Mr. Henry Conlin, and to the fact that that letter refers to the copies or a copy of the lease of December 12, 1907. Did you receive a copy of that lease?

- A. It would seem so from that letter.
- Q. Do you recollect what you did with it?
- A. No; I don't.
- Q. Was that lease ever recognized by you as acting land agent in any way?
- A. No. My only recollection of this is by reason of Mr. Calvin's letter in which he designates it as a "substitue lease."
- Q. You understood that to mean as a substitute for the lease of August 2, 1904, did you not?
- A. Yes sir. I had forgotten altogether about the date of that, though I had some papers in this file I know now, but it had escaped me altogether.
- Q. Did you call the attention of Judge Cornish to this letter of Mr. Conlin's of December 27, 1907?
- A. I think we had a discussion of that same subject, and I think I took the Judge's advice as to the matter of recognition. The matter came up, as I remember it, as I was uncertain in the premises, because, if that was a new lease executed in full, as i recollect that it was, though I don't remember now who executed it, but it was executed in full by the officers of the company, it became pertinent for me to know whether that was peoper at that time, and my recollection is—Now, this is not definite, but I believe this is the fact—that that word "substitute" was what made it desirable to continue our policy in regard to that, for fear we might be tangled up in some way with that old matter. [976]
- Q. Well, now, was any comparison made by you at that time of this new lease, substitute lease of De-

cember 12, 1907, and the old lease of August 2, 1904, as to description?

A. I don't remember of ever having made any.

Q. You had the old lease in your possession in New York at that time?

A. Yes; that was in my possession at that time. As to this I don't recall the fact, only that letter shows that I did receive a copy of it.

Q. Well, independently of that letter, is it your recollection that you did have a copy?

A. I don't now recollect. I do recollect of having some discussion on that subject, that matter of substitute lease. Now, as I say, those recollections are vague, because it came in at a time when we were extremely busy with other things and all during the first of 1908, and until I left, the Oregon and California matters were taking all the time.

Q. Did you turn over the copy of the lease that was sent with Mr. Conlin's letter to Judge Cornish when you left?

A. I must have done so, I think, or it must have gone back to San Francisco with the general ruck of stuff that was there.

Q. Was there any discussion between you and Judge Cornish, after Mr. Conlin's letter was received together with this copy of lease, concerning the two leases, that is, the one that Mr. Conlin sent and the old lease?

Mr. Mills—I object to that question, because the witness has stated that he has no recollection of receiving a lease accompanying the letter of Mr. Conlin.

A. I don't have any recollection of a comparative discussion of that at all. I don't recollect of ever having compared the terms of the leases. If the lease was there, as would [977] seem to be indicated from this letter, I rather think that it didn't get very much discussion at that time except as to that one fact that I speak of. That was the only thing that would engross our attention, because if that was not material then the lease would be all right, I assume.

Q. By Mr. Lewers—You say, as I understand it, that you had long prior to that time discussed with Judge Cornish the matter of keeping the files separate?

A. Oh, yes; that came up several times, and there were reasons why it did come up apart from anything with the Southern Pacific.

Q. Now, did he tell you anything about the danger of vouchers slipping in, or was that discussed between you?

A. Oh, that was discussed, as I remember, the first time we talked.

Q. And was that the reason which he assigned for keeping this lease and file separate?

Mr. Mills—I object to that question, because the witness has gone over that completely yesterday, stating the reasons that inspired that discussion.

Mr. Lewers-Not on cross-examination.

Mr. Mills—He stated the several reasons, as I recall the testimony, why Judge Cornish regarded that as a dangerous file, and to keep them separate, and he enumerated the reasons. Q. By Mr. Lewers—I will ask the question again: Did Judge Cornish give as a reason for keeping that file separate, the danger of vouchers being slipped in there for pipeage charges?

A. As I remember it, that is one of the reasons. I don't think that was all the reason that was given.

Q. Now, you say you had discussions a good many times with him with reference to keeping that file separate? [978]

A. That came up several times, to my recollection.

Q. And was any discussion had concerning that at the time when this new lease of December 12, 1907, was executed?

A. I don't remember the fact. It may have been, but I can't remember it.

Q. Well, was any inquiry made by Judge Cornish at that time as to where this file was, or was he informed?

A. The Judge knew that I had it, because he had told me to take charge of it and keep it, keep it close, for my own protection as well as his own.

Q. That is, he knew at all times, up to the time when you resigned, that you had that file?

A. Yes sir; he knew it, and, as I say, it was a matter of maybe not frequent discussion, but he asked me on one or two occasions that I have some recollection of—just the dates or probable dates I could not recall—as to whether I had it.

Q. By Mr. Mills-Had the file, you mean?

A. Had the file; yes.

Q. By Mr. Lewers—And did Judge Cornish say

to you in so many words that he desired you to keep that file for his protection as well as your own?

A. He put it on me. He said, "You may have occasion to use that for your own protection".

Q. Did he say against what?

Mr. Mills-Let the witness finish his reply.

 Against any possible complication that might arise.

Q. By Mr. Lewers—Did he regard that file as valuable as a protection?

A. Yes; I think he did. He considered that lease very valuable.

Q. He never suggested destroying it, did he ? [979]

A. No sir; not at all.

Q. Or any of the correspondence?

A. I think not. I never heard such a suggestion

Q. You have testified that Professor Dumble occasionally applied to your office for lists of land or made applications in connection with land?

O. Yes.

Q. Did you ever furnish any information of that kind?

A. Oh, yes; I think so.

Q. When was it that he began making those applications?

A. Well, I think there is a reply to one of those applications in evidence here.

Q. Do you remember which exhibit it is?

A. I think it is in a letter written by Mr. Stone

Mr. Mills-Stone to Dumble.

The Witness-It gives a list of the lands.

Q. By Mr. Lewers—You are referring to the letter of October 8, 1904?

A. Yes sir.

Q. Well, was not that a list that was furnished in connection with this Kern Trading and Oil lease to show the status of the lands in that lease?

Mr. Mills—I object to that as extremely leading and suggestive. The document will show for itself what it is.

A. Well, I don't know. It does not say so here and the only thing that would lead to that belief would be the chronological order of these letters.

Q. By Mr. Lewers—Well, did it not concern land that was embraced, a portion of it, in that lease?

A. I see here in Township 30 South, 23 East. That is in that lease.

Q. That is Section 31 of that township? [980]

A. No; I am wrong. "30-23"?

Mr. Mills-I think there is one section in that lease.

A. 30-23 is here, but it is not in that lease.

Mr. Mills-Yes; there is one section there.

Q. By Mr. Lewers—Was not that letter written during the time when the discussion was going on between your office and Mr. Markham's office concerning the execution of this lease?

Mr. Mills—I object to that as leading and suggestive. The witness has stated that he does not know whether that was in connection with the lease or not.

Mr. Lewers—Well, if you will listen to the questions you will not be interposing these frivolous objections, which are merely for the purpose of delay. Read the question. (Last question by Mr. Lewers read by the Examiner.)

- A. Oh, it was during that fall when the matter was under discussion.
- Q. And it was after you had made, or your office had made, the objection that the lease contained a description which was incorrect?
 - A. Yes; subsequent to that letter of mine.
- Q. When did Judge Cornish die, Mr. Eberlein? Do you remember the time?
- A. I think he died early in 1909. I think in January, 1909.
- Q. It was after you had severed your connection with the San Francisco office?
 - A. Oh, yes; yes.
 - Q. And Mr. Harriman died when?
- A. I think he died in May, 1909. That is simply recollection. I cannot fix dates or even months. But I think they died, both, in the early part of 1909.
- Q. At page 1930 of the record, yesterday's transcript, you were asked with reference to Mr. Markham as follows: [981]
- "Q.—Still, was Mr. Markham impatient concerning your refusal to follow his suggestion. A.—Mr. Markham was one of the most pleasant men I ever met. We didn't agree as to these things—not that he was short, but he was pretty positive. Q.—He was insistent upon his views? A.—Oh, yes; he was insistent upon his views and I could make him see it my way always." Should not that be, "I could not make him see it my way always"?

A. Oh, yes; certainly. The very context shows it. Mr. Lewers-And, while we are on the subject of errors, I desire to call attention to the fact, so that there may be no misapprehension about it, that at the bottom of page 1847, of the proceedings of July 1st, Mr. McCormick asked the following question of counsel for the defendant: "Mr. McCormick-We also ask you to produce the lease mentioned in the letters which have just been introduced in evidence and marked respectively 'CCC' and 'DDD' designated therein as the 'general lease which the Kern Trading and Oil Company holds in Coalinga" in the one instance and 'general lease which the Kern Trading and Oil Company holds' in the other." As the record appears, no answer was given by counsel for the defense. That is probably due to the fact that there was a general discussion going on and the reporter didn't catch it. My recollection is that I replied that we understood that the lease referred to in those two letters was the lease of August 2, 1904, and that there was no other lease.

Mr. McCormick—Yes. You further stated at that time that you had no record of that lease either in the way of a duplicate or the original—or a copy of it— in your files; you could not find it.

Mr. Lewers—No, I didn't say that, because I have found one copy. Where it came from I don't know.

Mr. McCormick—Would you mind showing us that? [982]

Mr. Lewers—I have no objection, but I haven't it with me. It is just the same as the other one.

Mr. McCormick—"Other one"? The one of December 7th?

Mr. Lewers-No; the one you introduced.

Q. Mr. Eberlein, have you a copy of the testimony of July 1, 1912, before you?

A. Yes sir.

Q. Will you turn to page 1826?

A. Yes sir.

Q. And, referring to the question beginning at line 19, you answer as follows: "We naturally recognized at least the very ambiguous position in which we would be placed, both of us, by that lease, if that lease were made—and especially if I made the lease, I having also made the selection list which was at that time unapproved".

A. That is corrected in the lines below. I didn't mean "unapproved". It was approved, but not patented.

Q. Well, at the time when you had this conversation with Judge Cornish, had not the patent been issued on December 12, 1904?

Mr. Mills—The witness has already stated that it hadn't been, and the context later shows plainly that it hadn't been.

Mr. Lewers—I am speaking of the time of the conversation.

Mr. Mills—Yes, of the conversation in which he called attention to it.

A. I don't think that was known at that time. It is too far away for me to be positive about anything, but this is my conclusion—not a fact: If that

patent was issued on the 12th—I don't recall the date. You stated it and I have no doubt it is true—the fact of it probably didn't reach me for some time later, because those patents are not always sent promptly. [983]

Mr. Mills-I think you went into that yesterday.

Q. By Mr. Lewers—What I want to get at is this. When you made that answer in response to Mr. Mills, were you referring to the time when you wrote the letter or were you referring to the time when you had the conversation with Judge Cornish?

Mr. Mills—I object to that question as extremely leading, because the witness has stated that in that conversation with Judge Cornish the patent had not yet issued.

Mr. Lewers—I object to this method of constantly attempting to coach the witness. I desire to get at the facts and not the government's theory.

Mr. Mills—That is the objection I am making to your question, that you are attempting to lead him into a statement that is a palpable error?

A. I believe it refers to the discussion down there in New York.

Q. By Mr. Lewers—Then when you say that the land had not then gone to patent you mean that you probably had not heard of the patent?

A. Oh, I don't pretend to say in that when the patent issued, because I didn't know, and don't know now except what you told me yesterday. These things passed from my mind long ago. I may have known at some time the date of the patent, but it never im-

pressed itself on me at all. That was not important to me. In this discussion I have no doubt that we were discussing it without knowing that fact. If that issued on the 12th of December it must have been some time after that before I learned it.

Q. Now, after you had learned that the patent was issued, you had discussions with Judge Cornish about the matter, didn't you? [984]

A. Oh, these discussions lasted as long as I was in

the employ of the company.

Q. And at the time when your office received a letter from Mr. Calvin, on December 27th or 26th, 1907, in which Mr. Calvin stated that he had been unable to find a copy of the lease, did you inform Mr. Calvin that you had a copy?

A. No, I don't think so. I was not here at the time. I don't think I had any discussion. Oh, I may have written him a letter, but I won't be positive.

Q. You have no copy of any such letter, have you?

A. No sir, I have not.

Q. And did you at any time in your official capacity as acting land agent of the Southern Pacific Railroad Company in any way recognize the second lease?

A. No sir.

Q. And you continued your refusal to recognize the pipeage charges, or the lease in any form, as long as you acted as land agent?

A. That is correct.

Q. Even though the patent had been issued long before?

A. Yes sir.

Q. And did you consider the terms of second lease any more favorable than the terms of the original lease as a matter of business policy?

A. I don't remember of ever having read that

second lease.

Q. Now, in your letter of September 10, 1904, to Mr. Markham, and also in your letter of September 3, 1904, to Judge Cornish, you make the objection that the existing leases of oil lands are being transferred to the Kern Trading and Oil Company and that a reduced royalty will be received. Now, can you find anything in that lease of August, 1904, that indicates that that is the fact? [985]

A. I assume it is, from the statements in those letters. I have not read that lease for a long time and I could not tell you anything about it now.

Q. That was your belief at the time, was it not?

A. It must have been.

Q. Well, hasn't it been true, as a matter of fact, that under the operation of that lease the Southern Pacific Railroad Company received the same rental that was provided in these individual leases?

Mr. Mills—I object to that question until the witness has the opportunity to read the lease. We have

it here in evidence. Let him see it.

Mr. Lewers—I am asking what actually happened.

A. I can't testify to that. I don't know.

Q. As you don't know what was actually received?

A. No; I don't. That would be natural, too, be-

cause those matters were handled, I think directly from Mr. Dumble's office to the auditor's office and what credits we got were credited on the books down there. The books were not kept in our office, nor were they subject to our control. I never saw the books. I organized that bureau and my first month or six weeks here on the ground was largely taken up in that business, but after that I had nothing to do with it.

Mr. Mills—Here is the reference in there. (Handing document to witness.) Here is the letter. (Hands Examiner's transcript to witness.)

The Witness—In my very cursory examination of that I do not see a reference to those leases; but may I ask, is not the land that is subject to those leases—is not that transferred by this lease?

Q. By Mr. Lewers—I will call your attention to the concluding paragraph of that lease, if I may, wherein it is stated, [986] "All of the rights hereby granted being, nevertheless, subject to any and all leases of and rights of way over any part or portion of said described premises heretofore made or granted by the party of the first part", and ask you whether at the time when you examined that lease in 1904 your attention was directed to that paragraph at the end of the long description of the lands?

A. No; I don't recall it. However, just off-hand, now, I take that to refer to rights of way that then existed for pipe lines and water lines and telephone lines and things of that kind which were being continually granted over the oil lands of the company.

That was one very serious thing we had to deal with—the continual demand for the acquisition of rights of way for one purpose and another.

Q. Then that was probably your understanding at that time?

A. I think so.

Q. At any rate, you did have the impression that this transferred existing leases at a reduced royalty?

A. I certainly did.

Q. And you don't know what the actual practice under the leases was so far as payments to the rail-road company were concerned?

A. No. I think that was carried on entirely outside of our department.

Mr. Lewers-Take the witness.

Mr. Mills—Let me ask you if there was not a separate instrument assigning these leases which accompanied the lease to the Kern Trading and Oil Company, which you have in your possession?

Mr. Lewers—No. There was a separate instrument which assigned one or two leases belonging to the Southern Pacific [987] Company. That was all. The Foltz lease I believe it was. I have another request to make that I would like to make at this time. Has the government in its possession any correspondence with the witness George A. Stone?

Mr. Mills—I don't know of anything, Mr. Lewers. I think not.

Mr. McCormick-None whatever that I have seen.

Mr. Lewers—Is there in existence, to your knowledge, a letter written by him to the Department of

Justice or to any other government official in connection with the matters that have been testified to by him.

Mr. Mills—I have heard of such a letter, but I have never seen it and I have as yet never made any search for it.

Mr. Lewers—Will you endeavor to secure that. We desire to have it.

Mr. Mills—I shall produce it if we have it. I thought at first your question related to any correspondence between Mr. McCormick or myself and Mr. Stone.

Mr. Lewers-Well, that is another matter.

Mr. Mills—I have nothing, unless possibly some statement as to when he was coming to Los Angeles, but I don't recall anything even of that nature.

Whereupon the further taking of testimony herein was adjourned until Friday, July 5, 1912, at 10 o'clock A. M., at the same place.

On Friday, July 5, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed.

[988]

By agreement and consent of counsel the further taking of testimony herein was adjourned until 1 o'clock P. M.

On Friday, July 5, 1912, at one o'clock P. M., the further taking of testimony herein was resumed pursuant to the adjournment:

Whereupon, CHARLES W. EBERLEIN was recalled for redirect examination, and testified as follows: By Mr. Mills:

Q. I call your attention, Mr. Eberlein, to page 1876 of the of the reporter's transcript, in which the following colloquy took place: "Q-Then the selection of these indemnity lands was part of your plan in protecting the interest of the company, was it? A-Yes. Q-And who ordered or directed that this selection be made, list 89? A-I ordered the selection list to be made. Q-By Mr. Lewers-Was that done at the instigation of Mr. Stone? A-'At the instigation'? Q-Yes. A-No. I rather think I instigated Stone." Now, I ask you whether at the time you came into the land department of the Southern Pacific Railroad Company, defendant, which you stated was about August 12th, and during the same month this selection was made up, you had any specific knowledge of these particular lands at the time that list was made?

A. No sir. It would be impossible for me to have had.

Q. Will you state the circumstances, then, of how this list came to be made up, so far as you recollect it?

A. It seems to me I have testified as to that.

Q. Well, I will ask you the specific question: Did you instigate Mr. Stone to make up this particular list 89?

A. It seems to me the word "instigated" is an improper one [989] to use in that connection.

Q. Well, it was suggested by counsel for defendants and you adopted it.

A. Well, I don't think there is any instigation

about it. The fact, as I have already testified to, is simply the carrying out of the general policy of keeping the surveyed lands selected, and that is how this list originated, I believe.

Q. Did you give any specific orders to Mr. Stone to go and make this particular list of lands?

A. Do you mean by "this" the particular descriptions on that list?

Q. Yes; the particular descriptions.

A. No.

Q. Either by sections or townships?

A. No sir. I would not have known them if I had been told. It must be remembered that I was as green about the land affairs of the Southern Pacific, almost, as it was possible to be. I had given no attention to land matters particularly. I had been engaged since I came there in organizing the land accounts bureau, getting the machinery ready and set in opereration that I was sent there to do, and what you are talking about was something that had not occurred at that time.

Q. When was the first notice you had of the particular list? Was it presented to you by Mr. Stone?

A. Yes.

Q. Was that the first notice you had of the specific lands mentioned in that list?

A. I didn't read the list at all. It wouldn't have done me any good to read it. I was depending entirely on Mr. Stone's knowledge of the lands, which he had been over, as I remember his having told me, that qualified him to give me the information on

which I could make a non-mineral affidavit. [990]

Q. You did not, as I understand it, then, pick out these particular tracts of land, or know anything about them, or remember of ever having heard of them before?

A. Never. I knew nothing about the records of the office at that time. I could not have made up that list at the time if I had wanted to. Mr. Stone was familiar with that work, and had been for a long time, and he continued to do that work in that way as long as I was connected with the department.

Q. Did you, on that occasion, or any other occasion, to your recollection, send Mr. Stone, or anyone else, out to make any specific examination of these tracts of land?

A. No sir; I did not understand there was any made.

- A. At no time, you say?
- A. Not that I know of.

Q. Now, did you ask him, at the time the nonmineral affidavit was presented to you, as I assume it was, when the list was presented—was it?

- A. The list was presented?
- Q. The non-mineral affidavit.
- A. Yes sir.

Q. When he presented you that did you say anything to him at all?

 A. I asked him about the character of the land; yes sir.

Q. Now, after that time, on any other lists of land, while you were the acting land agent,—was it your

custom, after you became more familiar with the land grant, to make more specific examination of the tracts of land which were about to be selected by the company?

- A. Oh, we afterwards had field men and made considerable selections as I remember it, under Mr. Stone's direction.
- Q. I am asking about the general policy of your administration—whether, subsequent to this list, it was your custom [991] to send out parties to examine land specifically?
- A. I don't remember, have no recollection, of the lists, the dates they were made, or anything about it. As I say, that was the branch of the work that was entirely delegated to Mr. Stone. Somebody had to do it. It would have been as impossible for me to attend to those particular, specific matters, as it would for the president of the Southern Pacific to grease the wheels on the engines.
- Q. Now, you have stated, and I am quoting solely from my memory, as I have not the reference here before me, that there was no co-operation between Mr. Dumble and you office during that time? I think I have stated that correctly.
 - A. During what time?
 - Q. During that year, 1904—or during 1903.
- A. I would amplify that and say there never was any co-operation.
- Q. Well, I don't ask for any amplification. I am calling your attention to this particular statement. Do you know, as a matter of fact, or do you now wish

to be understood as saying, that Mr. Dumble never came into your office and had a talk with Mr. Stone with respect to the selection of lands yet unpatented which he believed to be mineral and oil-bearing?

A. Well, all I can say is that I know nothing about it. I have no knowledge of it, if he did.

Mr. Lewers—Nor has anybody else. It is a gratuitous suggestion on the part of counsel, and is not redirect examination.

Q. By Mr. Mills—What did you refer to, Mr. Eberlein, in one of your responses to a question, as "a joker" in the resolution of the board of directors appointing you as land agent? I merely want to clear it up. I don't want any amplified statement. What did you mean by it, is all I want. [992]

A. I simply referred to the language inserted, which I would not wish now to be understood as having been placed in there in any surreptitious way. I merely referred to the language which makes the grant of powers to me subject to the approval of the president or any vice-president; and my reference to that as "a joker" is by reason of the peculiar and uncomfortable "mix-up" that succeeded—I called attention to that matter to my own superior officer—for the reason that it hampered and impeded the work of the land agent. He could not do the work as he should.

Q. How was Mr. Stone's appointment brought about as assistant to the acting land agent?

A. Simply that I appointed him and took the ap-

pointment over to Mr. Kruttschnitt to ratify, which he did.

Q. Now, you have referred, on examination by Mr. Lewers, to a letter which was received by Mr. Kruttschnitt, written by Mr. Stone, in which Mr. Stone threatened to lay this matter before the Department of Justice or give it to the press, and you have stated, "So, nothing was done", in respect to that letter. Was there anything done after the receipt of that letter?

A. Well, let me inquire. You say "this matter"?

Q. I refer to the matter contained in the letter, whatever it was.

A. Oh, it had no reference to this particular contention here.

Q. I am talking about the subject matter of the letter.

Mr. Lewers—I think the witness should be permitted to finish his answer.

- Q. By Mr. Mills—Well, I want to make myself clear. I am speaking of the subject matter of the letter which Mr. Stone wrote, whatever it was. [993]
 - A. The letter was written.
- Q. Please answer my question whether anything was done in response to or in connection with that matter.
 - A. Yes.
 - Q. In reference to looking it up.
- A. It as referred to me by Judge Cornish, with the request to know what he meant. I couldn't tell him what he meant. It was a vague threat that he

would lay matters in his knowledge or possession before the Department of Justice, and give them to the press. I couldn't tell what he meant. I knew of nothing, and I didn't attach much importance to it; but I did communicate with Henry Conlin, who was my assistant, asking him to find out, if he could, what Mr. Stone meant.

- Q. Well, did you write him, or wire him?
- A. I suppose I wired him.
- Q. You wired him.
- A. I naturally would, I think.
- Q. Did he ever make any report to you as to what it was, if you recall now?
 - Mr. Lewers-Have you that telegram, Mr. Mills?
 - Mr. Mills-No. I ask you if you have.
 - Mr. Lewers—No. I think you have those papers.
- Mr. Mills—I have no papers whatever—They have not been introduced—that I know of, now, excepting what I have already announced to you.
- A. I don't recall any report. I presume he answered me, but if he did he could not give me any information; because it made no impression on my mind if he did.
- Q. As nearly as you can recall now, Mr. Eberlein, and simply for the purpose of having it correctly appear in the record, when did you first become acquainted with Mr. Dumble, who has been referred to here as consulting geologist? [994]
- A. I have cudgeled my remembrance for the answer to that question and I am extremely vague. Remember, it was a long time ago. And Mr. Dumble,

my belief is, as nearly as I can fix it in my own mind, was not a resident in San Francisco during the first part of my acquaintance with him or knowledge of him. I understood that his headquarters and his home were in Texas. As nearly as I know, or can fix it, I probably didn't know Mr. Dumble before 1904, early in the year, probably.

Q. Early in the year 1904?

A. Probably early in the year 1904. I would like to make an inquiry, for the purpose of fixing something in my mind.

Q. Certainly.

A. If Mr. Shoup can tell me, do you remember whether we moved from the Wells-Fargo Building on Second and Mission streets in 1904? Was that the year? Was it December, 1904, that we moved from there into the new quarters.

Mr. Shoup—I could not answer that question without looking it up.

The Witness—If other men can't remember these things, perhaps I may be excused.

Mr. Shoup-I will try to look it up and tell you.

Q. By Mr. Mills—In your letter, dated September 21, 1904, from Mr. Eberlein to Mr. C. H. Markham, and introduced in evidence, found on page 1759 of the reporter's transcript, you make the statement, "I didn't wish to blunder along and bring myself into collision with Mr. Dumble as to matters as to which it would be his right and not mine to decide." As early as the month of September, at least, 1904, you had met Mr. Dumble, had you not?

- A. Yes; I certainly had.
- Q. And knew who he was?
- A. Oh, yes. [995]
- Q. On page 1746, there is a letter introduced in evidence addressed to W. D. Cornish, in which you say, on September 10, 1904, "For your information I beg to hand you copy of letter of this date to Mr. Markham setting forth the objections to the lease of Southern Pacific Company to Kern Trading and Oil Company." Now, on page 1748, a letter dated September 10th, addressed to Mr. Markham, and I ask you whether that last letter was the letter which you refer to in your letter to Judge Cornish.

Mr. Lewers—That all appears in evidence, Mr. Mills.

Mr. Mills-Well, I was not certain about it.

A. Yes sir; that must be the letter that is referred to.

Q. Then you sent a copy of the Markham letter of September 10th, 1904, to Judge Cornish?

A. I did.

Q. On the same date?

A. Yes sir.

Q. Now, at the time of your visit to New York, when you talked over the subject matter of this lease with Judge Cornish, you had with you the file which you have referred to here, containing this correspondence and lease. Do you know whether Mr. Cornish at that time had in his hands these two letters, the letter which you wrote him September 3rd and the

copy of the letter of September 10, 1904, to Mr. Markham?

A. I don't know how I could know that fact, Mr. Mills, without having some preternatural ability to look back. But Judge Cornish was a lawyer, and I think that it was his invariable practice to have all the papers before him. In all the matters that I transacted with him I had to cart back and forth great quantities of papers to submit to him. His usual formula was, "Well, let us see the papers", and I have no doubt and I believe the fact to be, that he did have all these papers before him. [996]

Q. Did he give you any reason, or have you any reason now to know why Judge Cornish did not reply to the letter of September 3, 1904?

A. Anybody that knew Judge Cornish would be able to answer that question.

Q. Unfortunately I didn't have the pleasure of knowing Judge Cornish.

A. No. Well, I believe I have testified to it before. Judge Cornish is dead, and what I say is not to be taken as any reflection upon him. I want that understood.

Q. Yes.

A. He was a peculiar man, and notwithstanding the fact that I was his confidential man, and was for years—I think the only one he had—still he never put himself on record. My belief is that he always wished to leave himself in the position where he could take matters up as though he had had no previous information. It was a peculiarity of mind, it was a

peculiarity of habit, but it was a fact, nevertheless. And not only in this case, but I think in about every case, things became acute in many ways, and it was not an unusual thing for him to wire me to come on to New York without telling me what he wanted, leaving me entirely to divine what he might want. Whether he sent for me in this case I don't know. But I did go, and I did take this matter up with him. and I would not have thought of proceeding without his concurrence and his direction. I would have had no right to do so under my particular instructions and my appointment, which you must remember did not come from the board of directors but came from New York. And it must be remembered, too, that my appearance in San Francisco, my continuance here, and the main reason of my being here, was to make a reorganization. This business was thrust upon me, this particular business of being a land agent, and the temporary [997] nature of my employment here is fully shown in the title "Acting land agent". It was not my intention to be loaded with that. I would not be anybody's land agent for any length of time if I could help myself.

Q. Well, what was the reason, do you understand, Mr. Eberlein, that he didn't reply to your letter of September 3, 1904?

A. I think it would take a clairvoyant to find that out. I don't know, excepting just what I have said. I don't know how to explain it otherwise. He did not reply.

- Q. Do you know whether he wired you to come to New York?
 - A. I don't remember that.
- Q. When you went to New York you discussed the matter referred to in the letter?
 - A. Oh, yes, it was fully discussed.
- Q. Now, there are some matters in that letter referring to pipeage charges and reduction in the gross amount of royalty, and several collateral matters in addition to the statement regarding the establishment of the mineral character of these lands by the execution of that lease.
 - A. Well.
- Q. Was Mr. Cornish in any wise interested in any of those other matters?
- A. Let me see if I understand what you mean. You mean as to these matters—
- Q. Did he take up the details of pipeage, and pipeage charges, and royalty? Was he interested in that sort of thing?
- A. I don't think he was interested in those, except as to one thing as to which I am clear, and that was as to the passage by me of bills for pipeage.
- Q. Because they would serve as a recognition of the lease, do you mean? [998]
- A. He informed me as a lawyer that that might be considered as a recognition and ratification by me whether I signed the lease or not. I never had any advice from anyone else regarding it but from Judge Cornish.
 - Q. Now, is it not a fact that the paramount mat-

ter discussed by you at that meeting with Mr. Cornish, and the only thing which was regarded as of any importance whatever by either one of you, was the actual danger threatened of etsablishing the mineral status of the lands involved in this suit by the execution of that lease to the Kern Trading and Oil Company?

Mr. Lewers—To which we object, on the ground it is leading and suggestive. I suggest also that it is calling for the conclusion of the witness. The best evidence is what was actually said and done and not the conclusion of the witness at this time. It is the counsel's language and is not based on anything in the record.

A. As near as I can remember, after this lapse of time, that matter was discussed, and pretty fully discussed, as to the relation that the execution of that lease might put me in in regard to the list that was already in and approved.

Q. Was not that the principal subject under discussion between you and Mr. Cornish?

A. It may have been, because it was a very important matter.

Q. Was Mr. Cornish in any wise, to your recollection, interested in any of these collateral matters, which were matters of detail, referred to in the letter, such, for instance, as the reduction of the gross amount of royalty, and so on?

A. Oh, I don't suppose he was interested in that, because I imagine he would think that was within the province of the gentlemen here. Whether he considered those as entirely irrelevant and immaterial I

can't tell you, because he might [999] have had his own ideas about that which he didn't convey to me.

Q. By "the gentlemen here", whom do you mean?

A. I mean the manager of the Southern Pacific and his assistants and co-ordinate officers.

Q. During that discussion in respect to this selection list, did you have in mind at that time the effect of the execution of this lease upon the good faith of your non-mineral affidavit and the question that might be raised by the government?

A. I think we both recognized the possibility of the thing being called into question some time—some-

body's good faith.

- Q. Now, on that proposed lease, Mr. Eberlein, of August 2, 1904, which has been introduced in evidence here, there appears an endorsement, "Approved as to form, W. F. Herrin. Approved as to description, E. T. Dumble". You knew at that time who Mr. Dumble was, did you not?
 - A. Yes sir; I think so.
- Q. That he was the consulting geologist of the Southern Pacific Company?
- A. I think I knew what his title was; not much more.
- Q. Now, you had seen Mr. Markham sign the lease, as I understand it, and you left for Denver? Is that right?
 - A. That evening; yes.
- Q. And during your absence the lease was sent to your office? Is that correct?
 - A. Yes sir; that is correct.

- Q. And subsequently Mr. Stone notified you by wire at Denver that the lease had been received?
 - A. Yes.
 - Q. And you replied to that?
 - A. I did.
- Q. Now, during that month, do you recollect whether you took any time to go thoroughly over the lease before you wrote [1000] the letter of September 3, 1904?
 - A. I don't remember, but I hardly think so.
- Q. You were busily engaged in other matters, I think?
- A. I can't place my movements further than I went to Denver and I went to Omaha-I remember who I went with from Denver to Omaha—and I had matters on the Union Pacific which I was loaded with. as well as matters out her, which called for attention, and I don't remember whether I went on to New York or not, but I was gone for a considerable time; and I returned here, and the only thing I have to fix anything of that month in mind by is the date of that rearranged list, which had escaped my mind completely until brought into evidence in Los Angeles. That was signed, as it appears, on the 3rd day of August. Now, the latter part of the month in the land department was a very busy time, cleaning up the flotsam and jetsam of routine-payrolls, and everything, and signing of all kinds of routine matters so that my belief is that I didn't give that any attention, or very little attention, during that month or

until the first of the following month. That would be the reasonable thing to suppose from the ordinary process of business and work in the department.

Q. Now, referring to your letter of September 3, 1904, to Mr. Cornish, in which you specifically call attention to certain objections you had to the lease, do you now recollect whether you had given any time to digest that lease before you wrote that letter?

A. Oh, yes; I think I had taken time to sit down and read it carefully and make some analysis of it. I could not have written a letter, otherwise, with reference to it.

Q. Did you at the time you wrote that letter have any reason to believe, or any suspicion, that these men who attempted to have you execute that lease had a greater amount of knowledge [1001] upon the subject matter of these lands than yourself?

A. As to "these men", I can only testify as to one. The appearance of Mr. Herrin's name on that is not significant at all. It is simply to approve the document as to its form. Mr. Dumble's name on there, and that certificate, is a different thing. That brought to my attention, as I believe, from what I can recall, the circumstances as they existed at that time. That was a surprise to me, and I objected to the preparation of such a document, which called, and must call, for the records of my office, without any reference to the office, as that was. I don't know, I don't think I knew or had any notice at all, that Mr. Dumble had any connection, or knew anything about the Southern Pacific

Railroad lands. He was an officer, consulting geologist, at least, of the Southern Pacific Company, and he had no connection with me that I knew of; and, as the examination of the list by the people in my office showed that there were mistakes, I called Mr. Markham's attention to it, and the language of that reference in the letter shows something of my condition of mind at that time in reference to that particular matter. It was a rather mild form of protest, but it was a protest.

Q. Didn't you have reason to suspect at that time, Mr. Eberlein, that Mr. Dumble at least had knowledge of the mineral character of these lands, or, at least, knowledge of the character of the land, which he had withheld from you?

Mr. Lewers—Objected to as calling for a conclusion and not calling for a statement of any facts at all. Whether he had reason to suspect, one counsel may think there was reason to suspect and other counsel may not think so.

Q. By Mr. Mills—(Continuing). I speak now of September 3rd, when you wrote that letter.

A. Well, now, it is impossible for a man—That is a [1002] psychological problem which it is pretty hard to solve at this distance of time. As to just what my state of mind was at that time it is very hard for me to say or to fix. The fact as I now remember it, and as seems to be fixed by my letter to Mr. Conlin, was that here was a man certifying as to the correctness of a list of land, the only list of which was kept in my office, and as to his connection with that I didn't know

that he had any or had asked for any information. If he had it had slipped me—if I had known anything about it, and I didn't believe I did. It may have raised in my mind some uncertainty as to what Mr. Dumble knew; but as to whether it was as to mineral character I can't tell you. However, taken in connection with protests I made thereafter, I may have had a feeling that Mr. Dumble had knowledge of lands which I did not have. You remember the last letter introduced in evidence is a protest of mine against Mr. Dumble's examining unpatented lands without any knowledge of or reference to or co-operation with the land department. I think it is a very reasonable thing for any man cha charged with the duties that I was charged with-the duty of making a non-mineral affidavit on the very best information he could obtain. as I did-to have the feeling that some man examined those lands and charged the company with notice but without charging me with notice. Now, that is as far, I think, as I can go in this matter.

Q. By Mr. Lewers—By that letter to Mr. Conlin, you refer to the letter of February 22, 1908, do you not?

A. Yes sir.

Q. By Mr. Mills—But that was a continuation of your protest which you had made repeatedly, was it not, against Mr. Dumble examining lands not yet patented?

A. About examining any lands. How would they know whether they were patented or not? The ex-

amination of Southern Pacific [1003] lands without any knowledge, consent, approval, or any co-operation with the responsible land officer—he was in danger of being placed in an anomalous position, at least, all the time.

By Mr. McCormick:

Q. Have you the volume with page 1933 in it?

A. Yes sir.

Q. At that time I believe Mr. Lewers was questioning you with reference to this conversation which you had with Judge Cornish in New York, and the question at the top of page 1933, relating to that conversation, is as follows: "Q—And you went quite fully into that matter with him, did you? A—Oh, yes; we went into it very fully, because I had no desire to block anything out here." What did you have reference to when you made that statement?

A. Undoubtedly to the action that these gentlemen were attempting to take out here. If the gentlemen wanted to make a lease, a proper lease, of lands for any purpose, I didn't see that it was any of my business to get in their way. In this particular instance I thought the lease was improper to be made in the form that it was.

Q. You stated after that, "I simply wanted to be relieved of the responsibility, and he, of course, didn't want to be placed in the position of standing in the way of any action out here." Does your explanation with reference to what you meant yourself apply also to the way he treated it?

A. Certainly I so understood it at the time. But I further say here that "He knew nothing about it".

Q. Now, in the letter found at page 1755, letter from Mr. Markham to Eberlein, dated September 21, 1904, the last clause of the letter suggests that Mr. Eberlein consult Mr. Dumble and the law department in order that the lease may be properly drawn. [1004] What law department did you understand was referred to there?

A. The only law department there was—the one presided over by Mr. William F. Herrin as chief counsel of the Southern Pacific Company.

Q. That was the law department of the Southern Pacific Railroad Company as well?

A. I understand it to be so, and of every other branch of the railroad company.

Q. Now, as I understand your testimony, when you were directed to come out here by Mr. Cornish, at that time no instructions whatever were given to you, nor did you know, that you would be called upon to attend to the duties of land agent of the Southern Pacific Railroad Company at all?

A. No; it was absolutely not thought of at all.

Q. And the first time that it was suggested to you or you were told that you would be expected to attend to those duties was when Mr. Kruttschnitt broached it to you?

A. Yes sir.

Q. And thereafter the resolution a copy of which has been introduced in evidence here was passed?

- A. Yes sir.
- Q. Giving you the authority to act as such land agent?
 - A. Yes sir.

Mr. Mills—That is all. I will reserve the right to recall the witness if anything further comes up on which I think I need his testimony.

Mr. Lewers—We will reserve the right also to recall him for further cross-examination, on sufficient notice.

The Witness—There are about four days testimony here that I have not had a chance to read over. Will I have the right to look that over and offer any suggestions about it?

Mr. Mills—Undoubtedly. I will furnish you a copy, and [1005] if you find that any errors have crept into it you may come back here and correct it.

RECROSS EXAMINATION OF CHARLES W. EBERLEIN

By Mr. Lewers:

- Q. At the time when Mr. Kruttschnitt requested you or arranged for you to become acting land agent of the Southern Pacific Railroad Company, Mr. Kruttschnitt was the general manager here on the coast, was he not?
 - A. Yes sir.
- Q. And occupied the same position that Mr. Markham did afterwards?
 - A. Yes sir.

- Q. And Mr. Kruttschnitt had been in control, had he not, of Mr. Jerome Madden as land agent of the Southern Pacific Railroad Company?
- A. I presume he had. I don't remember. I suppose he had, because that was prior to the time of the purchase of the Huntington interests by the Harriman system and the whole control of land matters was here and must have been under the general manager.
- Q. Now, when you first came to the coast and were engaged in your work of reorganization, you became familiar, did you not, to some extent, with the situation concerning indemnity lands?
- A. I don't remember of any particular information I had. If so, it was exceedingly general, because, in the time I was here, as I have already testified to, we were very busy organizing that land accounts bureau, getting that started. [1006] Mr. Erastus Young was here during that six weeks that intervened between the time I came and the time I took that appointment.
 - Q. Who was Erastus Young?
- A. He was general auditor, at that time, for the Harriman lines, and he came here to co-operate with me in regard to that particular matter. Now, the particular matter as to which I was informed at that time in regard to the Southern Pacific land department was the condition of its contract assets. There were questions arising there, simply questions of the accounting and how we should handle certain things.

Q. But what I want to get at is whether, at the time when you took charge as acting land agent, you didn't have in mind the desirability of not losing any further indemnity lands, if possible?

A. I think I was alive to that. The matter of surveys is probably one of the first things I would look into.

Q. Now, did you not learn, immediately after you took charge of the office, that the survey of Township 30-23 had been filed in the Visalia Land Office?

Mr. Mills-Objected to as leading and suggestive.

A. Now, as to whether I knew that that particular township had been filed I don't know. I think that I did find out that certain surveys—where they were now I don't know—had been made some months prior, and my recollection is that I thought the proper thing was to get all the land that we were entitled to, because we had a large amount of base.

Q. By Mr. Lewers—Well, did you give orders accordingly?

A. I gave orders to Mr. Stone to make a list, to select as much indemnity land as he could. We had a large amount of base, as I remember—50,000 acres, about—and nothing like that amount of indemnity.

Q. Well, did Mr. Stone in any way start you in this movement [1007] to select this list?

A. I don't believe he did.

Q. Did you start him?

A. I suppose I did.

Q. Well, what is your recollection upon that?

A. My recollection is just as I testified here, that I presume I asked for information as to surveys.

Mr. Mills—I move that that be stricken, as not responsive, and, moreover, as extremely vague, and based entirely upon a presumption.

Q. By Mr. Lewers-Proceed.

These things have to be based on presumptions, because they are exceedingly far away at this time; made no particular impression at the time, and therefore I can't testify definitely. But the natural course of proceeding would be that I looked into that condition of affairs, and told Mr. Stone, who was familiar with all the bases and all the lands, and the booksand he was the only man, by the way, in there, at that time, that was, because there were a number of men there discharged. So that it threw that work entirely on Mr. Stone, as being the only man left in the department who had sufficient knowledge by which he could make up that list. I could not have made the list up. I never did make a list up in my life. I don't know anything about it, much. But as to how that list came to be made, that is my general recollection; and I am sorry I can't make it any more particular.

Q. Well, did anyone suggest to you the making of that list?

A. No sir; not that I know of.

Q. Would it not have impressed itself upon your mind at that time if somebody had come from some other department and suggested to you that you had better make a list of the lands?

Mr. Mills—I object to that as extremely leading, and [1008] testifying into the record yourself. The witness has stated he does not recall very much about this.

A. I would have remembered that, I am very sure. But I don't think any such thing ever occurred at any time that I ever remember.

Q. By Mr. Lewers—Now, in your letter of February 22, 1908, to Mr. Conlin, which has been introduced in evidence here, you refer to protests against Mr. Dumble's activities. Now, had you made any such protests at any time prior to September 1, 1904? Did you ever have any occasion to, to your knowledge?

A. No sir; I don't think I had occasion to do so.

Q. Well, did you at any time in 1904, that you can recollect, make any protest against Mr. Dumble's activity in examining lands?

A. I can't put my finger on any specific time or any specific circumstance. I think I did at different times in conversation with Judge Cornish, possibly with Mr. Markham.

Q. Well, was that in 1904, or afterwards?

A. Well, there is another time when I can't fix dates, but coming on the heels of this matter that we have under discussion I think I had in mind the danger of anybody taking upon themselves to examine the lands not of the land department.

Q. That is, you had in mind, did you not, that the land department might in good faith go ahead without knowledge that somebody else was competent?

A. Yes sir.

1316

- Q. That is what you meant by that letter, is it not?
- A. By this letter?
- Q. Of February 22, 1908?
- A. Oh, yes; it is evident from the letter that that is just what I meant—that I, for instance, might make a selection of lands depending on my examination, and a trained geologist might have been over that same ground without my [1009] knowledge and whether I was right or wrong I felt that inasmuch as he was connected with the Southern Pacific there might be a chance of a claim that I was charged with notice in some way. I could not be, but still the claim might be made. It must be remembered that all the time, at least, that I was in the service, it was the ruling of the department, as I understood it, that surface indications was all that governed in the matter of the selection of lands.
- Q. Now, did you tell Judge Cornish, in any of your conversations, that Mr. Markham, or anybody else here, was insisting on the execution of this lease or the carrying out of it?
- A. Yes. That matter was under discussion by us several times. That appeared from the letters that came up; and the Judge brought the matter up to me several times and asked me what the condition of things was in regard to that.
- Q. Do you know whether Judge Cornish ever actually read the proposed lease of August 2, 1904?

A. No; I can't swear to the fact that he did. He was a fellow that never took any more trouble than he had to, and he depended upon somebody else to read it, as a usual thing, in a matter of that kind. He may have skimmed it through. I can't say.

Q. Do you remember ever seeing him examine it in your presence?

A. We had it there. I remember of our having that lease and looking at it more than once a considerable length of time; but I think likely he depended upon me to analyze it. With reference to the question asked me yesterday by Mr. Lewers with regard to the individual leases, I desire to say that I assumed that inasmuch as the lease itself carried with it the lands, the royalty provided in the general lease would control; that [1010] is, they were getting possession of those leases and they would be entitled to collect the royalty on the original lease and were bound by the terms of the general lease to pay only one-tenth of the royalty.

Q. That is, your understanding at that time, when you wrote these letters, was that the royalty to be received by the Southern Pacific Railroad Company would be reduced in all cases to one-tenth?

A. Yes sir.

Q. But you don't know what the actual practice under that lease was?

A. No; I can't tell you. I don't remember.

Mr. Lewers-That is all.

REDIRECT EXAMINATION OF CHARLES W. EBERLEIN

By Mr. Mills:

Q. I call your attention to page 1805 of the reporter's transcript, which is a portion of the description of the lands in the lease to the Kern Trading and Oil Company, and ask you if there is any reference made there to the individual leases?

A. In the descriptions of land in the Coalinga district there appears the following: "Including leases on Section 31", that is, of Town. 19 South, Range 15 East." Then, immediately under that, "Including leases on each," which has reference to Sections 1, 13, 23 and 25, Town. 20 South, Range 14 East. And following that is this language: "Including leases on Section 7", which refers to Township 20 South, Range 15 East. [1011]

(Endorsed) Equity No. In the United States Circuit Court of Appeals for the Ninth Circuit. The Southern Pacific Company, a corporation, et al., Appellants, -vs- The United States of America, Appellee, Exhibit A. To be printed. Volume II. Filed Jan. 27, 1917, Wm. M. Van Dyke, Clerk, By Chas. N. Williams, Deputy Clerk. [1011½]

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NINTH CIRCUIT SOUTHERN DISTRICT OF CALIFORNIA NORTHERN DIVISION

THEUNITED STATES OF AMERICA,

Plaintiff,

-V8-

THE SOUTHERN PA-CIFIC COMPANY, a corporation, et al, Defendants. EXHIBIT A.

Condensed Statement of Evidence in Transcript on Appeal as Approved by the Court and to be Printed.

VOLUME II. [1011¾]

CHARLOTTE DOROTHY CUNNINGHAM, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I am a married woman and my maiden name was Abraham. My Christian name is Charlotte Dorothy and I am known by the name of Lottie. I reside in Kentfield, Marin County. During the month of September, 1905, I was employed in the Land Office of the Southern Pacific Railroad. At that time I was seventeen years of age. I was employed by Mr. George A. Stone, and our offices were in the building of the Merchants Trust Company, No. 1035 California St., San Francisco. I was stenographer for two years and then was made file clerk and continued in that capacity until September, 1906. Mr. Stone was

employed in that office at the time I left. He superintended all of the work of the office. I knew Mr. Eberlein. Anyone that came to that office to see Mr. Eberlein would have to see Mr. Stone first.

On plaintiff's exhibit KK, purporting to be a copy of a letter dated September 10th, 1904, directed to C. H. Markham, General Manager, Southern Pacific, and signed Charles W. Eberlein, Land Agent, and consisting of three pages, the letters "L" and "A" is my handwriting, and the initials on that letter "H. K." are those of Herman Koch, an employe in the Land Office the same as I was. The initials "L. A." on plaintiff's exhibit JJ are my initials and the initials "H. K." on the same exhibit are those of Mr. Herman Koch. My initials were placed there by me and Mr. Koch's by him. On plaintiff's Exhibit II and plaintiff's exhibit HH and plaintiff's exhibit GG and plaintiff's exhibit FF and plaintiff's exhibit EE and plaintiff's exhibit OO and plaintiff's exhibit LL and plaintiff's exhibit MM and plaintiff's exhibit NN and plaintiff's exhibit PP and plaintiff's exhibit QQ and plaintiff's exhibit RR and plaintiff's exhibit SS the initials "L. A." are my initials [1012] placed there by me and the initials "H. K." are Herman Koch's initials placed there'by him. I did the typewriting that appears on these various documents that I have identified and which bear my initials. At the time I typed these documents I was in Oakland in the employ of the Southern Pacific Railroad Company. It was two weeks after the San Francisco fire of April 18th, 1906. I copied these various exhibits

which bear my initials from the burned originals of these letters which were handed me by Mr. Stone. who told me to copy them as they were and then compare them and hand them back to him and I let him know when I had finished them and was then told to compare them with Mr. Koch. As near as I can remember, when Mr. Stone handed me these letters he said for me to copy these papers and not to allow them to go out of my hands to anyone else in the office, none of the stenographers, but was to keep them myself, and return them to him personally. I remember this particular file of documents. They were not all handed to me at once, but several of them together. The originals were very badly burned and they had to be handled very carefully. I think I had them all together when I handed them back to Mr. Stone. I think I copied them all in one day. These documents are correct copies of the burned papers of which they purport to be copies. I know that because I would not have signed my initials to them if they had not been, and it was at Mr. Stone's instructions that I compared them with Mr. Koch. Stone told me to see that they were correct and to compare them with Mr. Koch. He told me to go over and sit on one side of the room near a little bay window of the office and compare them in an undertone, which we did. The papers from which these copies were made were very much charred and they were in no condition to be saved or kept in the files after we got through with them so they were destroyed. [1013]

CROSS EXAMINATION OF

CHARLOTTE DOROTHY CUNNINGHAM.

I copied other papers about the same time. There were a great many files that were charred that had been saved from the fire and I had a great deal of copying and comparing to do. I worked under the instructions and direction of Mr. Stone. I followed about the same method in copying others as I did in copying these exhibits. I compared others in an undert we in the same place that I did these, but not with the same secrecy as I did these. Mr. Stone didn't tell me to keep these secret but there was an air of secrecy about the handling of these papers. He told me not to give them into the hands of any other clerk in the office. He didn't tell me why and I didn't know why, but Mr. Koch and I compared them in an undertone. I had never seen this file before the fire and knew nothing about it. I have never seen a duplicate of it. If there was a duplicate of this file in the office before the fire I didn't see it, it was not kept in the general files. This copying was done in Oakland and we only had one room in which to do our work and there was about a dozen clerks there. When Mr. Stone brought these papers to me he told me to make exact copies of them and he said "I want you to keep these papers and you return them to me after you have finished with them". I had received similar instructions from him with respect to other papers, but with reference to these it was unusual in the way he said it; it was the quietness with which

he said it. I was impressed at the time that these papers were practically private and he said little things to give me that impression. He told me I was to copy them and to hand them right back to him and not to allow them to get in the hands of any of the other clerks or anybody else in the office. When he came around he would speak in a very low undertone in his [1014] little nervous way. Mr. Stone was nervous when there was any great excitement or anything to be nervous about, that was not his general manner. He didn't always speak in such a low tone and with an air that he didn't want anyone around to hear him. From the fact that he told me to keep those and return them to him without letting the other clerks in the office have them, and that he spoke in a low tone and appeared nervous, I concluded there was something very secret and vital about those papers. I think I was too young to understand the meaning of them. While I was comparing those papers with Mr. Koch, Mr. Stone hovered around a great deal. He was rather close. He seemed to watch those papers a great deal. I think Mr. Eberlein was in the office, I don't remember exactly. I didn't hear Mr. Eberlein give any orders in connection with these papers. We received very few orders from Mr. Eberlein himself. It was after I compared the papers that Mr. Stone told me and Mr. Koch to compare them in an undertone. I think that was stated in the presence of Mr. Koch. Mr. Stone said something about "sitting over here and comparing these so that the rest won't hear," and that is all I recollect. I remember his telling us not to read so loud. There were a great many clerks gathered in that small room and there were others engaged in similar copying work and I suppose the noise from one desk would disturb the others. There might have been others copying while Mr. Koch and I were comparing these papers. Mr. Stone did not hover around any of the others. He did not remain close to me all the time, but quite a bit. Mr. Stone searched out most of the burned papers and he would go back to the table with the burned papers on it and look them over and then come back and see how we were getting along. Neither Mr. Eberlein nor Mr. Stone had a private desk in that office, nor had they private offices, it was just one pretty good sized room and they both worked at a large table running down the [1015] middle of the room made up of boards on saw-horses. Everything was out in the open and everybody was working together and everything was in considerable confusion after the fire.

REDIRECT EXAMINATION OF

CHARLOTTE DOROTHY CUNNINGHAM.

I don't think this particular file of papers was in this endless confusion because it seemed to stand out separately.

THOMAS J. GRIFFIN, a witness called and sworn on behalf of the plaintiff, testified as follows:

DIRECT EXAMINATION

I will be fifty years old my next birthday and I re-

side in Los Angeles. From 1874 to 1904 I lived in Texas and became acquainted there with one J. B. Treadwell. His business there was oil operator. I knew E. T. Dumble, who was spoken of here as the consulting geologist of the Southern Pacific Company, at Beaumont, in Texas, and I understood that when he was there he was head geologist for the Southern Pacific Company. I first became acquainted with Mr. Treadwell in 1901. He is now located in Los Angeles and I see him nearly every day. I was pretty well acquainted with him in Texas. During the period of my acquaintanceship with Mr. Treadwell and Mr. Dumble, I was an oil operator, drilling and contracting. I was connected with the Southern Pacific Company during the year 1902 or 1903. In 1903 and 1904 I was in the employ of the Rio Bravo Oil Company, whose headquarters were at Houston, Texas. My employment was that of mechanical engineer of the fuel department. I had official connection with Mr. E. T. Dumble, but not with Mr. Treadwell, as he was not connected with the Rio Bravo Oil Company. I always considered the Rio Bravo Oil Company as a subsidiary corporation of the Southern Pacific Company. Mr. Treadwell's business down there [1016] in connection with the Southern Pacific Company was drilling and contracting, drilling wells and building oil tanks, storage, also buying oil for the use of the Southern Pacific Railroad. When Mr. Treadwell first came to Beaumont, I and everyone else that I knew of, considered that Mr. Treadwell was operating independently though he was doing business for the Southern Pacific. He was buying lands, drilling wells and contracting for oil wells and buying oil. In 1903 I was at Spindletop Oil Field in Texas. That's about four and a half miles from Beaumont, near a station called Gladys on the Southern Pacific road, between Beaumont and the Gulf. I was one of the organizers of the Spindletop Power Company. I was Vice-President and General Manager. We were engaged in the business of pumping, drilling for and selling oil. We furnished power for the use of Mr. Treadwell in connection with his wells that were known as the Treadwell wells. I first learned that Mr. Treadwell was not operating for himself, but really for the Southern Pacific, in 1902. In that year Mr. Treadwell told me: "Mr. Harriman and his party from New York, on a tour of inspection, will arrive in Beaumont today and is coming out to Gladys and wants to see the Southern Pacific well flow." I says: "What wells do you have reference to, Mr. Treadwell?" "Oh," he says, "these over here in the Hogswain Tract or Southern Pacific Wells. They belong to the company. I am only here operating and paying the bills, as there is a law prohibiting the Southern Pacific Railroad Company from doing this kind of business in the state of Texas." On that occasion I met Mr. Harriman, being introduced to him by Mr. Treadwell. I talked with Mr. Harriman and Mr. Dumble in 1902 and 1903 respecting the California Oil fields and I had several conversations with Mr. Treadwell about the Elk Hills. The first conversa-

tion I ever had with Treadwell regarding the California oil fields was at his office in Gladys. He told me he had just returned from the Kern River Fields and [1017] that he had been up on the west side looking over lands and had been out with a party of geologists and had made a careful examination and that he found oil sands and indications of oil from Sunset Field to Coalinga, including the flats and the Elk Hills, or what was known at that time as the Buena Vista Hills. At that conversation with Mr. Treadwell, he asked me if I wouldn't like to ship a rig, as I had several, out to California and to put in test wells and do the necessary assessment work on some of the west side vacant lands. There was talk between Mr. Treadwell and myself at that time respecting the going into an investment with him in the acquisition of even numbered sections of land in the West Side Field of California. In that first conversation we were sitting on the outside of Mr. Treadwell's office at Gladys. He said: "Mr. Griffin, the California Oil fields have not started yet. Our geologists have gone over it carefully. The proper thing for you to do is to get a rig, ship it out there at once, and I will go in with you and will put in the same amount of money that you and your partner, M. B. Bass does; I will invest as much money as you two; you go out there and take up even sections of lands. I will attend to the legal part of it and you people do the work, and we will divide up equally." He had a large map, two feet by three feet, showing the lands. The map started about one township below old Sunset and went up as far as the Town of Coalinga, running northwest and southeast. It included the Buena Vista Hills, Lake Tulare, and the Buena Vista Lake. By the Buena Vista Hills I mean the two groups of hills including what are now known as the Elk Hills. The lower are the Buena Vista Hills next to Buena Vista Lake and the upper are the Elk Hills, near Mc-Kittrick. The map showed unsurveyed lands located in the Elk Hills covering probably two or three townships. Mr. Treadwell told me that the unsurveyed lands in the Elk Hills were lands he and the geologists of the Southern [1018] Pacific Railroad had gone over, and that that was where he wanted me to go; that the lands would be surveyed very soon and as soon as they were surveyed, the Southern Pacific Railroad would make application for patent for the odd sections and he wanted me to take up the even sections. I am now familiar with the Elk Hills. my memory serves me right, the unsurveyed land that he showed me on the map that he wanted me to take up was in Township 30 South, Range 23 East, and included the lands involved in this suit. I became very much interested in the subject of coming out here to make that investment and I studied the map very carefully and asked Mr. Treadwell to let me have it. He said: "I can't; it is the Railroad Company's property and I can't let it out." The map showed the country by sub-divisions such as townships and sections. There was a legend on the map showing the character of the lands and there was a great deal of writing on the map. I don't know who prepared the map, but there was a geologist's name on it, but I don't remember who it was. I interested my partner in the matter. I had five or six conversations with Mr. Treadwell with reference to coming out, besides some letters from him. We were to come out here with one or two rigs and to develop the land as soon as Mr. Treadwell reported that it had been surveyed by the Government. About ten days after Mr. Treadwell showed me this original map, he gave me a copy that he had made. I have lost that copy. I first knew that this copy was lost on April 30, 1912. When I left Texas I left a lot of papers with a storage company in Beaumont and in April of this year I went to Beaumont with Mr. Ira M. Flocker, a special Agent of the U.S. General Land Office, to look for this map and the letters I have referred to. When I got there I asked the man in charge of the storage company about my boxes and he told me that most of the things had been sold for storage and that he had shipped some of the boxes that contained papers up to a ranch near a little place [1019] called Haywood. about sixty miles from Beaumont. Mr. Flocker and I went up there and looked for this map and letters. but were informed by the party on the ranch there that nearly everything we had come to look for was gone-had been destroyed. I found one of the boxes out in the yard with my name on it. It was being used for a chicken coop. The party in charge there told me that the box had a lot of old papers in it and he moved it out in the yard and he dumped the papers out and tried to burn them. Some of them burned and some of them were scattered around by 1330

the wind. We got a rake and raked under the house and found one paper there that belonged to me. It was a bill from the Letitia Rosenberg Old Women's Home of Galveston, Texas. We did not find the map or the letters from Mr. Treadwell. I am positive that this map and these letters were in the boxes that I put in storage. This map that Mr. Treadwell gave me was about two-thirds the size of the original and it was carefully laid off with sections, townships and ranges marked, showing the Buena Vista Lake, Lake Tulare; also the Buena Vista Hills. It also showed anticlines. The original map which had the name of the geologist on it contained some geological information. It was with reference to the anticlines and the probable depths at different places, in figures, showing where oil would be struck; showing also in red ink the croppings of sand at different places. It was a very carefully made map. In the spring of 1904 I had a talk with Mr. Dumble respecting particular lands near McKittrick. I had this conversation with him while I was in the employ of the Rio Bravo Company in Texas. There was no one present except Mr. Dumble and myself. Mr. Dumble was an officer of the Rio Bravo Company. The conversation came over Rio Bravo Well No. 107. We were at the well at the time and discussing the depth that the first strata of oil had been struck, where she was a gusher, and the probability of striking a lower strata and the gravity of [1020] that oil that we would find in the lower strata. He began to tell me about the low gravity oil of Kern County in the Kern Field

and Sunset and McKittrick. He said he would like to find an oil of that lower gravity, as it would be much better for fuel and not so dangerous from fire, and suggested that if Well No. 107 quit flowing or quit producing that he was going to take it up with New York and get an appropriation from New York to deepen the well and go down and make a test of it. He further said: "Mr. Griffin, the coming field is California and that is where you ought to go and get in. The territory is so large. I know every foot of it. I have been over it in person and it is so large that you can hardly put down a hole without getting oil. We own a great deal of that land. A great deal of it we haven't yet taken patents on, but we expect to." Subsequent to that I had another conversation with him in the spring of 1904 while I was in the employ of the Rio Bravo Company. We were riding together on the train and were just north of Bakersfield, going towards San Francisco, west of the Kern River Field. Mr. Dumble was sitting next to the window in the Pullman and he pointed over with his left hand and says: "Griffin, right over yonder about thirty miles is the biggest oil field in the world. know it: so does all the rest of us know it. We have large holdings over there. I think I told you about this some time ago and you should have gone over there, or you should yet. We have large holdings and expect to have more." At that time I was riding on passes of the Southern Pacific Company. I was furnished these passes by the Southern Pacific Company for the Sunset Route, the Texas and New Orleans,

1332

the Galveston, Houston and San Antonio, and all their other lines. I guit the employ of the Southern Pacific Company September 1, 1904, and this conversation with Mr. Dumble was prior to the time I quit the employment. I had other passes other than these which are here marked plaintiff's exhibits "EEE" [1021] and "FFF". I came to California on a pass and returned at the time I was riding with Dumble. Mr. Dumble was riding on a passbook at that time. At the time I was employed by the Rio Bravo Oil Company I kept the payroll, paid my men off by check. My check from the Rio Bravo Oil Company was sent me for my different men and upon the receipt of these checks and the payroll I would take the men to the agent of whatever railroad line I happened to be on or whatever station I was at and the agent would cash those checks, the railroad company's agents. The lines I referred to were the Texas and New Orleans, or the Louisiana and Western, or the G., H. and S. C., and what subsidiary lines I might be on. I knew C. B. Segar. In 1904 he was Secretary of the Rio Bravo Oil Company. At that time I think he was an officer of the Southern Pacific Railroad Company or the Southern Pacific Company. I know C. H. Markham. He was the President of the Rio Bravo Oil Company in 1903 and 1904, or part of 1904. Plaintiff's exhibit "GGG" is a notice from Mr. Segar, Secretary of the Rio Bravo Oil Company, notifying me of sending me my check roll No. 62 for men. I got that in the course of my business and official connection with that Company. The exhibit

reads as follows: "Rio Bravo Oil Company, General Office, Houston, Texas. Greenwell Fav, President, E. T. Dumble, Vice President, C. B. Segar, Secretary, B. C. Cushman, Treasurer, Houston, Texas, July 14, 1904. Mr. T. J. Griffin, Welsh, Louisiana. Dear Sir: I beg to hand you herewith pay-check roll No. 62 covering time certificates issued in favor your men for work done in July, which go to agent at Welsh by express this day. The certificates will be cashed when the men are identified by you. Yours truly, C. B. Segar, Secretary, J. W. W. C." I received orders from Mr. Dumble all the time. He it. was that I took orders from. He or Mr. Markham. I received this letter marked plaintiff's exhibit "HHH" from Dumble. It reads as follows: "Houston, Texas, June 28, 1904. Erection of 10,000 bbl [1022] tank-Sour Lake: Mr. T. J. Griffin, Sour Lake, Texas. Dear Sir: Please hurry the erection of the 10,000 barrel tank at Sour Lake as much as possible. We may have to put it into use on very short notice and I would like to have it ready. Keep me advised promptly progress of work. Yours very truly, E. T. Dumble C CC to TJG Beaumont."

CROSS EXAMINATION OF THOMAS J. GRIFFIN.

I came to San Francisco last Saturday morning a week ago and have been here continuously since that time, and have been staying at the Goodfriend Hotel. I don't think there is a night since I have been 1334

here that I have not been there. At five or half past five last night I was in my room at the Goodfriend Hotel. I did not call Mr. Lewers up at that time over the telephone and give my name as Franklin, and I did not tell Mr. Lewers that a lady by the name of Mrs. Brown would call upon him in the morning at half past eight o'clock in regard to this case. I did not this morning send a lady who went by the name of Mrs. Brown to Mr. Lewers' office to make a business proposition with him in connection with my testimony and she did not later report to me that there was nothing doing. I positively did not tell her that I had in my possession the letters and maps and that Mr. Lewers could have them for a consideration. I don't know the name of a woman Mr. Lewers referred to. I never heard of her. I positively did not have a conversation with any woman this morning with reference to this case. I have not been to a cafe this week with any woman nor have I been to any place of entertainment or amusement with a woman this week. There was no woman in my room last evening at five o'clock. There has never been a woman in my room. I was in R. H. Herron's office in the Monadnock Block from 4:30 o'clock until just before half past five, talking to Mr. [1023] Nellis, and I left the Monadnock Block and came up Market Street and met Mr. Mills at Powell Street. discussed nothing with any woman this forenoon. No woman asked me any question with reference to this case this forenoon and no woman told me that she was going to Mr. Lewers' office to see him this morn-

ing and no woman told me that she had been to Mr. Lewers' office to see him this morning. The only women that I have talked to this morning are Mrs. Goodfriend and her sister at the hotel. I have not talked with any woman during the last week while I was here in San Francisco about what I was going to testify to in this case and I have not told any woman about my conversation with Prof. Dumble or with J. B. Treadwell that I know of. I should think that I am in a position to remember. I was not under the influence of liquor during any of that time. I never was under the influence of liquor, drunk, in my life. I have been perfectly sober during all of the time I have been in San Francisco. I have told some friends of mine who are living in San Francisco that I am here as a witness for the United States Government in a suit against the Southern Pacific. I don't know whether I mentioned the name of Mr. Dumble. One of the friends I talked to was an oil man. I never spoke to Mrs. Goodfriend or her sister anything about this case. I did not tell any woman in San Francisco or elsewhere this last week that J. B. Treadwell had written me any letters, nor did I tell any woman in San Francisco or elsewhere this last week that J. B. Treadwell had talked with me about the Elk Hills or about Township 30 South, Range 23 East, nor that E. T. Dumble had discussed with me the Elk Hills or any land in that vicinity. I ceased to work for the Southern Pacific Company on September 1, 1904. I was not discharged and have never been bitter against the Company. I did not make any

threats that I would get Mr. E. T. Dumble if I ever got the chance, as he and I are the very best of friends. The first conversation I ever had [1024] with any representatives of the Government in reference to this case was in April of this year at Los Angeles. I did not make any written statement and have never signed an affidavit. I went to McKittrick in 1906 and had never been there before. I cannot say when I first learned that the Elk Hills were once called the Buena Vista Hills. The map that Mr. Treadwell showed me covered from about six miles south of Sunset up to Coalinga. It was quite a large map, probably two and one-half by three feet. I cannot say how many anticlines it showed nor where they were. I did not look at them. The map showed McKittrick, but I don't remember whether it showed any anticlines at Coalinga. I do remember that it showed anticlines somewhere. It showed wells with indications that there were producing wells in the Sunset Field and one or two wells in the McKittrick. This map did not show any wells in Township 30 South, Range 23 East. I can't say whether this map showed any anticlines in Township 30 South, Range 23 East. Mr. Treadwell told me at Gladys in the latter part of 1901 that he had been out with a party of geologists and that he went over the land from south of Sunset to Coalinga. I don't remember the name of the geologists that he was with. I do not know whether he mentioned Josiah Owen or not. I have met Mr. Owen. I don't know whether he said those geologists were working for the Southern Pa-

cific or not, but I inferred it. I had a second conversation with Mr. Treadwell at the same place about ten days after the first conversation. At the second conversation he showed me a map and gave me a copy, stating that this was a copy of the field made on a small scale. He said a great deal besides and wanted me to come to California and drill some on that land, that is, the vacant government land adjacent to the Southern Pacific land; land in McKittrick and near Coalinga. He pointed out Township 30 South, 23 East; I am positive of that. He wanted me to go and drill there as soon as [1025] it would be surveyed and accepted by the Government. I am positive he pointed out Township 30 South, Range 23 East. There were probably fifty townships on that map, but I remember distinctly this particular township. I have no feeling whatever against the Southern Pacific; positively none. I came here completely a disinterested witness. I was brought here. My first conversation with Mr. Mills was in the Post Office Building in Los Angeles, in the corridor near his office. That is the first time any Government man has talked to me about the case. I went there to see how the case was getting along. I heard they were up there taking testimony. I did not go up there and volunteer some information. We were discussing the case and I told him I knew something about it. I think that was the first intimation that he had that I knew anything about it. I met Mr. Mills in the corridor and we had a talk and he invited me to his office and in our general conversation I mentioned

1338

something about the Elk Hills, that I had an automobile and was an oil operator and had been superintendent of a couple of leases up there and that I had been traveling over the oil fields for the last two or three years in a machine. My business in seeing Mr. Mills was that I have in the Lost Hills and in the Devil's Den District placed some locations on Government lands with the intention of going on there and developing it and as the trouble came up over these lands I thought that probably I would get some information as to what the Government probably intended to do, and that is the reason I had the conversation the first time with Mr. Mills. In the conversation with Mr. Treadwell with reference to the California Oil Fields, he also mentioned Township 11-23, which is near Maricopa, and Township 25-20, which is in the Lost Hills. That is where I am located now. He also mentioned Township 30 South, Range 32 East, near the Buena Vista Lake. is northwest of the Lake. I have never been on that [1026] township. I was in the Elk Hills in 1906 and 1907. I did not make any locations there. I examined the Elk Hills with a view of going there and getting some of the land. I was in Section 28, Township 30 South, Range 23 East, and I was in Section 12, Township 30 South, Range 23 East. was in there especially as they had been located by other parties who wanted to sell their locations. did not purchase any locations in there. I made partial arrangements to go in with others, with a man by the name of Blather. Nothing was ever

done with those arrangements and I acquired no interest because I didn't have any money.

REDIRECT EXAMINATION OF THOMAS J. GRIFFIN.

Township 30 South, Range 23 East, is between Buena Vista Lake and McKittrick. When I spoke of Township 30 South, Range 32 East, I meant Township 32 South, Range 30 East.

(Thereupon counsel for the defendant announced: "That is all for the present. We reserve the right to recall Mr. Griffin for cross examination at a later period if we so desire.") [1027]

On Monday, July 29, 1912, at ten o'clock A. M., personally appeared before the special examiner, pursuant to the adjournment, Willis N. Mills, Special Assistant Attorney General; and thereupon the special examiner designated Tuesday, July 30th, 1912, at 10 o'clock A. M. at the court room of the United States Commerce Court, in the Southern Building, corner of 15th and H Streets, Washington, D. C., as the time and place at which the further hearing herein should be resumed.

On Tuesday, July 30, 1912, at ten o'clock A. M., the further taking of testimony herein was resumed pursuant to the adjournment, Willis N. Mills, Special Assistant Attorney General, appearing on behalf of the plaintiff, and Charles R. Lewers, Esq. and A. A. Hoehling, Jr., Esq., appearing on behalf of the defendants.

Whereupon the following proceedings were had:
Mr. Lewers—I desire to move that the name of Mr.
A. A. Hoehling, Jr., be entered as attorney for the defendants in this case, with the exception of the Equitable Trust Company of New York. [1028]

Mr. Mills—Very well. In response to a request made upon Mr. Shoup, one of the solicitors for the defendants, except the Equitable Trust Company of New York, there was handed to me the manual from the Secretary's files of the Southern Pacific and auxiliary companies, for the years 1902 to 1909, inclusive, which I desire to offer in evidence. Said manuals are respectively marked plaintiff's exhibits "I I I" to "P P P" and received in evidence subject to any objection which counsel for the defendants desire to interpose at the next session.

From Manual No. 1, for the year 1902, marked Plaintiff's Exhibit "I I I", the title page and list of the auxiliary companies found on pages 1, 3, 6, 7, 8, 10, 12, 13, 14, 15, 17, 18, 19, 20, 22, 23, 24 and 25; and on pages 26, 27, 28, 29, 30, 33, 34 and 35, the matter appearing thereon; also a continuation of the list of the subsidiary companies found on pages 36, 37, 39 and 41 of the manual—all of which I now read into the record, as follows:

SOUTHERN PACIFIC and AUXILIARY
COMPANIES.
———————

Manual No. 1—July 1, 1902.

Notice:-Officers receiving this volume will con-

fer a favor on the undersigned by giving him early notice of errors noted, or changes necessary, in the following pages.

Alex. Millar, Secretary. [1029] (Secretary's Files)

SOUTHERN PACIFIC and AUXILIARY COM-PANIES

Manual No. 1-1902.

-of-

Annual Meetings, Directors, Officers, Capital Stock, Funded Debt, Etc. July 1, 1902.

(1)

Carson & Colorado Railway Company. Incorporated, California, February 27, 1892, for 50 years.

Central Pacific Railroad Company. Incorporated, California, August 22, 1870, for 50 years.

(3)

Central Pacific Railway Company. Incorporated, Utah, July 29, 1899, for 50 years.

(6)

Cromwell Steam Ship Company. Incorporated. New Jersey, July 13, 1889, for 50 years.

(7)

The Direct Navigation Company. Incorporated, Texas, July 8, 1896, for 50 years. [1030]

(8)

The Galveston, Harrisburg & San Antonio Rail-

way Co. Incorporated, Texas, February 11, 1850, for Indefinite Time.

(10)

The Galveston, Houston & Northern Railway Co. Incorporated March 30, 1899, for 50 years.

(12)

Gila Valley, Globe & Northern Railway Company. Incorporated, Arizona, January 15, 1894, for 50 years.

(13)

The Gulf, Western Texas & Pacific Railway Co. Incorporated, Texas, September 5, 1850—under name of The San Antonio and Mexican Gulf Railway Company—which Company was consolidated with the "Indianola Railroad Company", under the name and style of the Gulf, Western Texas & Pacific Ry. Co., August 4, 1870.

(14)

Houston & Shreveport Railroad Company. Incorporated, Louisiana, October 8, 1891. No definite period stated.

(15)

Houston & Texas Central Railroad Company. In-

- 110 C INVOICE DEUTER	134
corporated, Texas, August 1, 1889, for 50 [1031]	years
(17)	
The Houston, East & West Texas Railway	
pany. Incorporated, Texas, March 11, 1875,	Com-
years from Completion of Road.	ior ou
· · · · · · · · · · · · · · · · · · ·	
(18)	
The Iberia & Vermillion Railroad Company corporated, Louisiana, April 6, 1891.	. In-
(19)	
Louisiana Western Railroad Company.	Incor-
porated, Louisiana, Acts of Legislature of 1878	with
perpetual succession, approved March 30, 1878	, with
	,
(20)	
Morgan's Louisiana & Texas Railroad & Stear	nchin
Company. Incorporated, Louisiana, March 8,	1077
for 40 years.	1011,
(22)	
The New York, Texas & Mexican Railway Co.	Ten
corporated, Texas, October 18, 1880, for 50 year	TII-
, 1000, 101 50 gea	rs.
(23)	
Oregon & California Railroad Co. Incorpor	
Oregon, March 17, 1870, for 99 years.	atea,
• • • • • • • • • • • • • • • • • • • •	
(24)	
Pacific Mail Steamship Co. Incorporated,	Nom
r co. incorporateu,	Hew

(25)

San Antonio & Aransas Pass Railway Co. Incorporated, Texas, August 28, 1884, for 50 years.

(26)

SOUTHERN PACIFIC COMPANY. Incorporated by Act of the General Assembly of the State of Kentucky, approved March 17, 1884, in perpetuity, for the purpose of unifying in management lines of railroad extending from New Orleans, La., to San Francisco, Cal., to Portland, Ore., and to Ogden, Utah.

CONTROLLED PROPERTIES.

The Southern Pacific Company is the principal owner of the capital stock of the following companies, and operates them under leases to it: Central Pacific Railway, Oregon and California Railroad, Southern Pacific Railroad of California, Southern Pacific Railroad of Arizona, Southern Pacific Railroad of New Mexico, Southern Pacific Coast Railway.

The Southern Pacific is also the principal owner of the capital stock of the following companies, which are operated by their own organizations, viz: Galveston, Harrisburg & San Antonio Railway, Texas and New Orleans Railroad, New York, Texas & Mexican Railway.

(27)

Houston & Texas Central Railroad, Galveston, Houston & Northern Railroad, Carson & Colorado Railway; Houston, East & West Texas Railway, Houston & Shreveport Railroad, Gila Valley, Globe & Northern Railway; and it operates under leases from the Atchison, Topeka & Santa Fe the lines of the New Mexico & [1033] Arizona Railroad and the Sonora Railway Companies.

The Morgan's Louisiana & Texas Railway & Steamship Co. is the principal owner of stocks in the following companies, which are operated under their own organizations, viz: Gulf, Western Texas & Pacific Railway, Direct Navigation Co., Iberia & Vermillion Railroad.

In March, 1902, the Southern Pacific Railroad of California, the Southern Pacific Railroad of Arizona and the Southern Pacific Railroad of New Mexico were consolidated into a new California company, the Southern Pacific Railroad Co.

The total extent of the lines owned by all the companies is 9,145 miles, and the total operated 8,941 miles.

The Southern Pacific Company also operates steamship lines from New York to New Orleans, La., and Galveston, Tex., New Orleans to Havana, and to Bluefields, Nicaragua, as well as ferry, harbor and river lines in Louisiana, Texas and California, aggregating about 5,365 miles, and owns 25 ocean steamers. In 1900 the company acquired a control-

ling interest in the stock of the Pacific Mail Steamship Co.

The Mojave Division of the Southern Pacific Railroad, 242 miles, is leased to the Atchison, Topeka & Santa Fe Railway Company, until 1979, at an annual rental of \$218,133.

DIRECTORS (15), elected April 9, 1902:

T. J. Collidge, Jr., Boston.

Wm. D. Cornish, New York.

George J. Gould, Lakewood, N. J.

E. H. Harriman, Arden, N. Y. [1034]

Edwin Hawley, New York.

H. E. Huntington, San Francisco.

James H. Hyde, New York.

Otto H. Kahn, Morriston, N. J.

(x) J. W. Mackey, New York.

D. O. Mills, New York.

Winslow S. Pierce, New York.

Jacob H. Schiff, New York.

James Speyer, New York.

James Stillman, New York.

Charles H. Tweed, Chairman, New York.

(x) Deceased.

(28)

EXECUTIVE COMMITTEE (8), elected April 11, 1902:

E. H. Harriman, Chairman.

George J. Gould.

Edwin Hawley.

Otto H. Kahn.

Jacob H. Schiff.

James Speyer.

James Stillman.

Charles H. Tweed.

OFFICERS

EXECUTIVE DEPARTMENT, elected April 11, 1902:

E. H. Harriman, President, Arden, N. Y.

H. E. Huntington, Vice-President, San Francisco.

Charles H. Tweed, Second Vice-President, New York. [1035]

J. C. Stubbs, Third Vice-President, Chicago.

J. Kruttschnitt, Fourth Vice-President, San Francisco.

Alex. Millar, Clerk and Secretary, New York.

N. T. Smith, Treasurer, San Francisco.

A. K. Van Deventer, Assistant Treasurer, New York.

W. V. S. Thorne, Assistant Secretary (July 17, 1902), New York.

G. T. Klink, Assistant Secretary, San Francisco. John B. Weaver, Assistant Clerk, Beechmont, Ky.

Alex Millar, Transfer Agent for Bonds and Stock, New York.

Otto C. Kahn, Asst. Trans. Agent for Bonds and Stock, New York.

A. K. Van Deventer, Assistant Secretary for signing Bonds and Stock, New York.

Union Trust Co., Registrar of Transfers, New New York.

LEGAL DEPARTMENT:

Charles H. Tweed, General Counsel, New York.

W. F. Herrin, Chief Counsel, San Francisco.

J. E. Foulds, Attorney, San Francisco.

D. R. Sessions, Claims Attorney, San Francisco.

E. B. Ryan, Tax Attorney, San Francisco.

W. W. Bretherton, Right of Way, Tax and Claim Agent, Portland.

ACCOUNTING DEPARTMENT:

Wm. Mahl, Comptroller, New York.

H. S. Bradt, Assistant Comptroller, New York.
[1036]

Erastus Young, General Auditor, Omaha.

G. T. Klink, Auditor, San Francisco.

C. J. Wilder, Assistant Auditor, San Francisco.

D. W. Horsburg, Freight Auditor, San Francisco.

H. S. Lincoln, Assistant Freight Auditor, San Francisco.

E. E. Holton, Ticket Auditor, San Francisco.

(29)

TRAFFIC DEPARTMENT:

J. C. Stubbs, Traffic Director, Chicago.

B. Campbell, Assistant Traffic Director, Chicago. Wm. Sproule, Freight Traffic Manager, San Fran-

cisco.

G. W. Luce, General Freight Agent, San Francisco.

S. N. Bostwick, Assistant General Freight Agent, San Francisco.

Thos. A. Graham, Assistant General Freight Agent, San Francisco. Chas. S. Fay, Assistant General Freight Agent, New Orleans.

W. E. Coman, General Freight and Passenger Agent, Lines in Oregon, Portland.

G. A. Parker, Asst. Gen. Freight and Pass. Agent, Los Angeles.

E. O. McCormick, Passenger Traffic Manager, San Francisco.

S. F. B. Morse, Asst. Passenger Traffic Manager, Houston.

T. H. Goodman, General Passenger Agent, San Francisco.

R. A. Donaldson, Asst. Gen. Pass. Agent, San Francisco.

Jas. Horsburg, Jr., Asst. Gen. Pass. Agent, San Francisco.

H. R. Judah, Asst. Gen. Pass. Agent, San Francisco.

M. L. Robbins, General Passenger Agent, Houston.

F. S. Decker, Asst. Gen. Pass. and Ticket Agent, New Orleans.

E. B. Carson, General Baggage Agent, San Francisco. [1037]

TRANSPORTATION DEPARTMENT:

J. Kruttschnitt, General Manager, San Francisco. Jas. Agler, Manager, San Francisco.

R. Koehler, Manager, Lines in Oregon, Portland.N. H. Foster, Manager's Assistant, San Francisco.

Geo. F. Richardson, Supt. of Transportation, Pacific and Atlantic Systems, San Francisco.

J. H. Wallace, Engineer, Maintenance of Way, Superintendent Telegraph, San Francisco.

H. J. Small, Gen. Supt. Motive Power, San Francisco.

Ben Welch, Master Car Builder, Sacramento.

ENGINEERING DEPARTMENT:

Wm. Hood, Chief Engineer, San Francisco.

LAND DEPARTMENT:

Wm. H. Mills, Land Agent, C. P. R. R., San Francisco.

Jerome Madden, Land Agent, S. P. R. R., San Francisco.

Geo. H. Andrews, Acting Land Agent, Portland.C. C. Gibbs, Land Commissioner, San Antonio.

SUPPLY DEPARTMENT:

M (+) (+) (+) (+) +

R. P. Schwerin, Manager, Purchases and Supplies, San Francisco.

R. Stevenson, Assistant Manager, Purchases and Supplies, San Francisco.

(30)

Southern Pacific Railroad Company. Incorporated, California, Arizona, and New Mexico, March 10, 1902, for 50 years. [1038]

FUNDED DEBT.

First Mortgage Gold Bonds of 1875, Series A to G, inclusive; authorized, \$46,000,000; issued \$39,-285,000 (outstanding June 30, 1902, \$30,212,500), viz:

A. Authorized and issued, \$15,000,000;
 dated April 1, 1875; due April 1,
 1905; outstanding June 30, 1902. \$12,636,500

- B. Authorized and issued, \$5,000,000;
 dated October 1, 1875; due October
 1, 1905; outstanding June 30, 1902. 4,521,000
- C. Authorized and issued, \$5,000,000,
 dated October 1, 1876, due October
 1, 1906; outstanding June 30, 1902. 4,016,000
- D. Authorized and issued, \$5,000,000;
 dated October 1, 1876; due October
 1, 1906; outstanding June 30, 1902. 3,915,000
- E. Authorized and issued, \$5,000,000;
 dated April 1, 1882; due April 1,
 1912; outstanding June 30, 1912. 3,160,000
- G. Authorized, \$6,000,000; never issued.

Interest, 6 per cent., gold, payable April and October. Trustees, D. O. Mills, New York, and Homer S. King, San Francisco. [1039]

(34)

Southern Pacific Branch Railway First Mortgage Gold Bonds: authorized, \$9,000,000; issued, \$3,578,-000; dated April 1, 1887; due April 1, 1937; outstanding \$3,533,000. Interest, 6 per cent., gold, payable April and October. Trustee, Union Trust Company of San Francisco.

Stockton & Copperopolis R. R. First Mortgage Gold Bonds: authorized and issued, \$500,000; dated January 1, 1875; due January 1, 1905. Interest 5 per cent., gold, payable January and July. Trustee, J. L. Willcutt, San Francisco.

Southern Pacific R. R. First Consolidated Mortgage Gold Bonds of 1893: authorized, \$58,000,000, and such additional amount of bonds as may be sufficient to retire, bond for bond, outstanding first mortgage bonds of the S. P. R. R. Co., issued under the mortgage dated April 1, 1875; issued, \$27,144,000; dated November 1, 1893; due November 1, 1937; outstanding \$27,125,000. Interest 5 per cent., gold, payable May and November. Trustee, Central Trust Company of New York.

Note:—Bonds issued under the Stockton & Copperopolis R. R. Mortgage of January 1, 1875, Southern Pacific Branch Ry. Mortgage of November 24, 1886, and Southern Pacific R. R. Co. Mortgage of August 25, 1888 (now satisfied and discharged), to be retired out of the above-authorized issue of \$58,000,000.

Northern Railway First Mortgage Gold Bonds of 1877: authorized \$6,300,000; issued, \$5,156,000; dated January 1, 1877; due January 1, 1907. Interest, 6 per cent., gold, payable January and July. Trustees, Eugene Kelly and Henry B. Laidlaw, both of the city of New York. [1040]

Northern Railway First Mortgage Gold Bonds of 1888: authorized, \$21,000,000; issued, \$4,751,000; dated October 1, 1888; due October 1, 1938. Interest, 5 per cent., gold, payable April and October. Trustee, Union Trust Company of New York.

Northern California Railway First Mortgage Gold

Bonds: authorized, \$1,100,000; issued, \$1,074,000; dated November 1, 1889; due November 1, 1929. Interest, 5 per cent., gold, payable June and December. Trustee, California Safe Deposit & Trust Co. of San Francisco.

California Pacific R. R. First Morgtage Gold Bonds: authorized and issued, \$2,250,000; dated January 1, 1867; due January 1, 1912. Interest, 4½ per cent., gold, payable January and July. Trustees, Jas. O'B. Gunn and Chas. E. Green, both of the City of San Francisco, Cal.

California Pacific R. R. Second Mortgage Gold Bonds: authorized and issued, \$1,600,000; dated August 9, 1871; due January 1, 1911. Interest, 4½ per cent., gold, payable January and July. Trustees, Jas. O'B. Gunn and Chas. E. Green, both of the City of San Francisco, Cal.

(35)

California Pacific R. R. Third Mortgage Gold Bonds: authorized, \$2,000,000; issued, \$1,998,500; dated July 1, 1875; due July 1, 1905. Interest, 6 per cent., gold, payable January and July. Trustee, Stephen T. Gage, of the City of San Francisco, Cal.

California Pacific R. R. Third Mortgage Gold Bonds: authorized and issued, \$1,000,000; dated July 1, 1875; due July 1, 1905. Interest, 3 per cent., gold, payable January [1041] and July. Trustee, Stephen T. Gage, of the City of San Francisco, Cal.

Southern Pacific R. R. (of Arizona) First Mortgage Gold Bonds: authorized and issued, \$10,000,000; Series A, amounting to \$6,000,000; dated March 1,

1879; due March 1, 1909, and Series B, \$4,000,000; dated March 1, 1880; due March 1, 1909, and Interest, 6 per cent., gold, payable January and July. Trustees, I. W. Hellman and Union Trust Company, both of the City of San Francisco, Cal.

Southern Pacific R. R. of New Mexico First Mortgage Gold Bonds: authorized, \$5,000,000; issued, \$4,-180,000; dated January 1, 1881; due January 1, 1911. Interest, 6 per cent., gold, payable January and July. Trustees, I. W. Hellman and Union Trust Company, both of the city of San Francisco, Cal.

DIRECTORS (11), elected June 5, 1902:

E. H. Harriman, Arden, N. Y.

Alvinza Hayward, San Francisco.

I. W. Hellman, San Francisco.

Wm. F. Herrin, San Francisco.

Homer S. King, San Francisco.

J. Kruttschnitt, San Francisco.

J. S. Slauson, Los Angeles.

N. T. Smith, San Francisco.

Chas. H. Tweed, New York.

J. L. Willcutt, San Francisco.

Jas. K. Wilson, San Francisco.

OFFICERS, elected June 5, 1902:

E. H. Harriman, President, Arden, N. Y.

Chas. H. Tweed, Vice-President, New York. [1042]

J. Kruttschnitt, Second Vice-President, San Francisco.

N. T. Smith, Treasurer, San Francisco.

A. K. Van Deventer, Assistant Treasurer, New York.

J. L. Willcutt, Secretary, San Francisco. Alex. Millar, Assistant Secretary, New York.

Alex Millar, Transfer Agent for Registered Bonds, New York.

Chas. P. Lincoln, Transfer Agent for Registered Bonds, San Francisco.

(36)

Southern Pacific Terminal Co. Incorporated, Texas, July, 6, 1901, for 50 years.

(37)

South Pacific Coast Railway Company. Incorporated, California, May 23, 1887, for 50 years.

(39)

Texas & New Orleans Railroad Co. Incorporated, Texas, September 1, 1856, for 90 years.

(41)

Wells Fargo & Company. Established, New York, March 18, 1852, and incorporated, Colorado, February 5, 1866. Charter unlimited as to duration.

Manual No. 2, for the year 1903, marked plaintiff's exhibit "J J J", the title page, the index and such matter as [1043] appears on pages 21, 30, 33, 34, 35, 36, 37, 40, 41 and 42, as follows, which I will read into the record:

SOUTHERN PACIFIC and AUXILIARY COMPANIES.

----oOo-----

Manual No. 2-July 1, 1903.

---000-----

Notice:—Officers receiving this volume will confer a favor on the undersigned by giving him early notice of errors noted, or changes necessary, in the following pages.

Alex Millar, Secretary.

(Secretary's Files.)

SOUTHERN PACIFIC and AUXILIARY COMPANIES.

Manual No. 2-1903.

of

Annual Meetings, Directors, Officers, Capital Stock, Funded Debt, etc.

July 1, 1903.

INDEX

	Page
Carson & Colorado Railway Co	. 1
Central Pacific Railroad Co	
Central Pacific Railway Co	
Coos Bay Oregon Coal Co	. 6
Cromwell Steamship Co	. 7
Direct Navigation Co	. 8
Galveston, Harrisburg & San Antonio Railway	7
Co	. 9
Gila Valley, Globe & Northern Railway Co	13

The United States	1357
Gulf, Western Texas & Pacific Railway Co	14
Houston & Shreveport Railroad Co	
Houston & Texas Central Railroad Co	
Houston, East and West Texas Railway Co	
Iberia & Vermillion Railroad Co	
Independence & Monmouth Railway Co	20
Kern Trading & Oil Co	
Louisiana Western Railroad Co	
Maricopa and Phoenix and Salt River Valley	7
Railroad Co	
Morgan's Louisiana & Texas Railroad and	1
Steamship Co	
New Mexico & Arizona Railroad Co	
New York, Texas & Mexican Railway Co	
Oregon & California Railroad Co	
Pacific Mail Steamship Co	
Rio Bravo Oil Co.	
Sonora Railway Co	
Southern Pacific Co	
Southern Pacific Railroad Co	37
Southern Pacific Terminal Co	
South Pacific Coast Railway Co	
Sunset Development Co	
Sunset Railroad Co	47
Texas & New Orleans Railroad Co	
Wells Fargo & Co.	
(21)	

Kern Trading & Oil Co. Incorporated, California, May 22, 1903, for 50 years.

ANNUAL MEETING may be held at San Francisco on last Saturday in May. Notices to be pub-

lished in one or more papers [1045] in the City and County of San Francisco, as the Directors may determine, at least ten days previously, or to be given in writing by the President to each stockholder personally.

Meetings of Directors, whenever necessary, on call of President.

No specification for close of fiscal year.

CAPITAL STOCK: authorized and issued, \$1,000,000. Shares \$100 each.

DIRECTORS (5), elected May 22, 1903:

J. E. Foulds, Berkeley.

J. Kruttschnitt, San Francisco.

J. H. Wallace, San Francisco.

J. L. Willcutt, San Francisco.

W. A. Worthington, San Francisco.

OFFICERS, elected May 22, 1903:

J. Kruttschnitt, President, San Francisco.

J. E. Foulds, Vice-President, Berkeley.

J. L. Willcutt, Secretary, San Fancisco.

N. T. Smith, Treasurer, San Francisco.

(30)

Rio Bravo Oil Co. Incorporated, Texas, March 3, 1903, for 50 years.

ANNUAL MEETING, Houston, Texas, second Monday in January. Written notice to be given at least five days previously.

Meeting of Directors can be held at any time.

Fiscal year closes June 30.

CAPITAL STOCK: authorized, \$1,000,000. Shares \$100 each.

DIRECTORS (5), elected March 13, 1903:

C. C. Barry, Houston. [1046]

E. T. Dumble, Houston.

C. H. Markham, Houston.

C. B. Seger, Houston.

W. G. Van Vleck, Houston.

OFFICERS, elected March 13, 1903:

C. H. Markham, President, Houston.

E. T. Dumble, Vice-President, Houston.

C. B. Seger, Secretary, Houston.

B. C. Cushman, Treasurer, Houston.

(33)

Southern Pacific Company. Incorporated by Act of the General Assembly of the State of Kentucky, approved March 17, 1884, in perpetuity, for the purpose of unifying in management lines of railroad extending from New Orleans, La., to San Francisco, Cal., to Portland, Ore., and to Ogden, Utah.

CONTROLLED PROPERTIES.

The Southern Pacific Company is the principal owner of the capital stock of the following companies, and operates them under leases to it: Central Pacific Railway, Oregon and California Railroad, Southern Pacific Railroad, South Pacific Coast Railway.

The Southern Pacific is also the principal owner of the capital stock of the following companies, which are operated by their own organizations, viz: Galveston, Harrisburg & San Antonio Railway, Texas

(34)

and New Orleans Railroad, Louisiana Western Rail-

road, Maricopa and Phoenix and Salt River Valley Railroad, New York, Texas & [1047] Mexican Railway, Houston & Texas Central Railroad, Galveston, Houston & Northern Railroad, Carson & Colorado Railway, Houston East and West Texas Railway, Houston & Shreveport Railroad, Gila Valley, Globe and Northern Railway; owner of half the stock of the Sunset Railroad Co.; and it operates under leases from the Atchison, Topeka & Santa Fe the lines of the New Mexico & Arizona Railroad and the Sonora Railway companies.

The Morgan's Louisiana & Texas Railway & Steamship Co. is the principal owner of stocks of the following companies, which are operated under their own organizations, viz.: Gulf, Western Texas & Pacific Railway, Direct Navigation Co., Iberia & Vermillion Railroad.

In March, 1902, the Southern Pacific Railroad of California, the Southern Pacific Railroad of Arizona and the Southern Pacific Railroad of New Mexico were consolidated into a new company, the Southern Pacific Railroad Co.

The Southern Pacific Company also operates steamship lines from New York to New Orleans, La., and Galveston, Tex., New Orleans to Havana, and to Bluefields, Nicaragua, as well as ferry, harbor, and river lines in Louisiana, Texas and California, aggregating about 5,365 miles, and owns 25 ocean steamers. In 1900 the company acquired a controlling interest in the stock of the Pacific Mail Steamship

